

OC001. ENHANCED REHABILITATION IN TRAUMATIC TROCHANTERIC SURGERY: PENG BLOCK VERSUS FEMORAL BLOCK

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Introduction: Trochanteric fractures are common to elderly patients. The pericapsular nerve group block (PENG block) has the advantage of targeting the sensory branches of the hip capsule ensuring early rehabilitation. Aim: evaluate the benefit of the PENG block in motor block resolution in the quadriceps muscle compared to the Femoral Nerve Block (FNB).

Methods: This was a prospective, randomized study conducted over 6 months including 50 patients over 65, with an ASA score of I to III, undergoing trochanteric surgery under spinal anesthesia. Two groups of 25 each, received the blocks 15 minutes before spinal anesthesia using the same solution (20mL of 0.2% ropivacaine). Primary endpoint was the motor block of the quadriceps muscle (complete/partial/absent) at knee extension at 6h. Secondary endpoints were visual analog scale (VAS) at 3, 6, 12, and 24h, quadriceps strength at 3,12, and 24h, time to first tramadol dose, total tramadol dose over 24h, time to first mobilization and length of hospital stay.

Results: Demographic, anthropometric and preoperative data were comparable. At 6h, motor block was less prevalent in the PENG group ($p < 0.001$). Motor block was complete in 4% in the PENG group versus 76% in the FNB group. The difference was also significant at 12 and 24h ($p < 0.001$). In PENG group, the time to first mobilization was earlier ($p = 0.001$) and length of hospital stay was shorter ($p = 0.123$). Pain assessment was comparable ($p > 0.05$).

Conclusion: The PENG block Results in less motor block of the quadriceps muscle, earlier mobilization and a shorter hospital stay.

OC002. PREOPERATIVE PREDICTION OF DIFFICULT LARYNGOSCOPY IN DIABETIC PATIENTS: IMPORTANCE OF THE PALM PRINT TEST

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Introduction: Endotracheal intubation in diabetic

patients can be challenging due to impaired mobility of the atlanto-occipital joint, caused by non-enzymatic glycosylation of connective tissue. This condition begins in the interphalangeal joints and can be evaluated using the palm print test (PPT). The aim of this study was to access the sensitivity of the Palm print test in prediction of difficult laryngoscopy (DL) in diabetic patients.

Methods: This prospective observational study included 150 diabetic patients undergoing general anesthesia with endotracheal intubation. Prior to surgery, patients were evaluated for airway status, Mallampati classification, head extension, thyromental distance, mouth opening, upper lip bite test, along with the prayer sign and the PPT. The PPT consists of scoring the ink impression made by the palm of the dominant hand. The sensitivity and specificity of these diagnostic tests in predicting DL were then compared with the Cormack-Lehane grading Results.

Results: DL was reported in 29 % of the patients. Of all the tests, the PPT was of highest sensitivity (77 %) and accuracy (Youden Index = 0.63) while thyromental distance had the highest specificity (88%). The Mallampati classification and the prayer sign also showed a significant correlation with DL. A combined score of all of the above had a sensitivity of 82% and a specificity of 80%, making it a potentially reliable and reproducible screening method of DL in diabetic patients.

Conclusion: The PPT appears to be the best indicator of a difficult laryngoscopy in diabetic patients. The combined score should be integrated in the preoperative airway assessment.

OC003. EFFECTIVENESS OF AEROSOLIZED LIDOCAINE ON THE PREVENTION OF COUGH AT THE EMERGENCE OF GENERAL ANESTHESIA

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Introduction: Tracheal intubation have side effects such as throat irritation, dysphagia and cough during extubation. These are a frequent cause of complaint and dissatisfaction among patients. The aim of our work was to evaluate the effectiveness of aerosolized lidocaine on the prevention of cough during extubation

Methods: This was a prospective, randomized, double-blind study. We included 84 patients. The inclusion criteria were age greater than 18 years, ASA class I, II and III and surgeries requiring general anesthesia with intubation.

A standardized anesthetic protocol was used. Patients were randomized into two groups: a group receiving 5ml of 2% lidocaine nebulized 15 minutes before anesthetic induction and a group receiving 5ml of isotonic saline. Our primary outcome was the occurrence of cough during awakening from anesthesia and we selected as secondary outcomes the occurrence of irritation of the throat assessed by a visual analogue scale, dysphonia and dysphagia. For the statistical analysis, the significance level was 5%.

Results: We did not find a statistically significant difference for cough at awakening from anesthesia ($p=0.18$). Postoperative pharyngeal irritation was comparable between the two groups at H2, H12 and H24. We noted a decrease in dysphonia at H12 and H24 postoperatively in the lidocaine group ($p=0.019$ and $p=0.036$ respectively). Postoperative dysphagia was not significant in both study groups.

Conclusion: Nebulized lidocaine made it possible to decrease postoperative H12 and H24 dysphonia with a promising effect on reducing the severity of cough at the onset of general anesthesia without being statistically significant.

OC004. PROTECTIVE MECHANICAL VENTILATION AND RISK OF POSTOPERATIVE COMPLICATIONS IN ABDOMINAL SURGERY

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Introduction: The prophylactic protective ventilation (PPV) with low tidal volume (TV), high level of positive end expiratory pressure (PEEP) and recruitment maneuvers (RM) may reduce postoperative pulmonary complications (POPC). Nevertheless, in current practice in anesthesia, the use of the PPV is not well adopted. The aim was to determine the effectiveness of PPV during open abdominal surgery on the reduction of postoperative morbidity.

Methods: We randomly assigned 80 non obese, ASA-II patients planned for open abdominal surgery lasting more than 2 hours in two groups receiving either TV=6 ml/kg of predicted body weight, 10 cmH₂O PEEP and systematic RM (PPV group) or a conventional ventilation (TV=8 ml/kg, PEEP=4 cmH₂O without RM for control group). Primary endpoint was POPC occurring within 7 days after surgery.

Results: The two groups had comparable baseline characteristics. In the PPV group, 5% of patients had POPC versus 38% in the control group with a relative risk (RR)=7.5 [IC95%:1.83-30.68] and p -value<10⁻³. Among the PPG, 3% had POPC without any other complication, versus 25% among the control group (RR=10 [IC95%:1.35-74]; $p=0.003$). Desaturation and atelectasis were reduced in PPV group ($p=0.019$ and $p=0.002$ respectively). During RM, 5% of the PPV group patients had hemodynamic compromise without need for vasopressor ($p=0.493$).

Mortality rate was 13% in control group due to septic shock and surgical site infection. No death occurred in PPV group ($p=0.055$).

Conclusion: The use of PPV approach with low Vt, high PEEP and RM was associated with a significant reduction in POPC after abdominal surgery.

OC005. HIP FRACTURE SURGERY IN ELDERLY PATIENTS: EFFETS OF ATRIAL FIBRILLATION ON POSTOPERATIVE MORBIDITY AND MORTALITY

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Introduction: Hip fracture and atrial fibrillation (AF) are two frequent comorbidities of elderly persons. The aim was to assess the impact of atrial fibrillation on morbidity and mortality following hip fracture surgery on elderly patients.

Methods: In this prospective and analytical study, we included 99 patients aged more than 65 years and scheduled for hip fracture surgery. This study was conducted over a period of one year at Mongi Slim Hospital. Patients were divided into two groups: the non-AF group and the AF group (patients with either persistent or paroxysmal atrial fibrillation, or new-onset atrial fibrillation). Patients were assessed preoperatively and postoperatively, and followed up at 3 months postoperatively. The primary outcome was mortality at 3 months postoperatively. SPSS software was used and a p -value < 0.05 was considered significant.

Results: The prevalence of AF was 27.3%. Patients with AF had more frequent histories of valvular heart disease ($p = 0.04$), lower hemoglobin levels at admission ($p = 0.01$), and were more often on multiple medications ($p = 0.03$). There were no differences concerning perioperative data and surgical delay. In-hospital mortality and mortality at 3 months postoperatively were 3.7% and 8.7%, respectively, for the AF group and 2.8% and 6.7% for the non-AF group ($p = 0.81$ and 0.75 , respectively). At least one postoperative complication was observed in 48.1% of the AF group compared to 27.7% in the non-AF group ($p = 0.05$).

Conclusion: In our study, atrial fibrillation does not increase mortality at 3 months postoperatively.

OC006. DE NOVO CARDIAC ARRHYTHMIA: INCIDENCE, RISK FACTORS AND POSTOPERATIVE COMPLICATIONS

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Introduction: The incidence of New-onset arrhythmias (NOA) following cardiac surgery (CS) is 10 to 65%. They increase morbi-mortality. The aim of our study was to determine the incidence and the impact of NOA on

postoperative complications and mortality.

Methods: A retrospective, monocentric study. We included patients aged 18 years and older, ASA II and III, underwent Cardiopulmonary bypass (CPB) surgery, presented with sinus rhythm, and had no history of arrhythmia in their past medical records. Our primary outcome was the incidence of NOA. Secondary outcomes included postoperative complications and mortality. Statistical analyses was performed using SPSS statistics.

Results: Over 2 years, Out of 303 patients who underwent CS with CPB, 30 patients presented NOA (incidence of 10%). The most common identified etiology was hypokalemia in 30% of cases. The length of stay in the intensive care unit was 3.98 ± 1.58 days, and the hospital stay was 9.4 ± 5.21 days. The resolution of NOA was observed in 20% of cases after an average of 16.97 ± 30.62 hours, with mortality in 3% of cases.

Conclusion: The aetiopathogenesis of NOA is complex, and risk factors are multiple and varied. The use of CHADS2 and CHA2DS2-VASc scoring systems, cardiac biomarkers as predictors of NOA, and liberal perioperative administration of beta-blockers and statins are highly recommended. Early identification and appropriate management can improve patient outcomes and reduce healthcare costs.

OC007. RISK FACTORS FOR FAILURE OF EPIDURAL EXTENSION DURING A CESAREAN SECTION

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Introduction: Fifty percent of cesarean sections occur during labor. To avoid the risks associated with general anesthesia, epidural extension has become widely adopted. Early identification of risk factors for failure of epidural extension is primordial to prevent it. The aim was to assess the risk factors for failure of epidural extension in the context of urgent cesarean sections.

Methods: This was a retrospective cohort study conducted over a 4-year period, including parturients who had an epidural catheter for labor and required a cesarean section. The primary outcome was failure of epidural extension (sensory level below D6). We performed univariate and then multivariate analyses using SPSS software.

Results: We included 100 parturients. The rate of epidural conversion failure was 41%. Parturients in the failure group had a higher weight gain during pregnancy (10.46 ± 3.91 vs. 5.92 ± 2.82 , $p < 0.001$), required more additional boluses (bupivacaine and sufentanil) (95% vs. 45%), and had a higher visual analog scale (VAS) score one hour before the cesarean section (5.5 ± 1.5 vs. 3.7 ± 1.4 , $p < 0.001$). After multivariate analysis, the number of boluses > 1.5 and weight gain > 8 kg were independent factors for failure of epidural extension, with odds ratios of 5.7 and 13.8, respectively. A predictive score > 11 increased the risk of failure by 17 times (with a sensitivity of 79.5% and

a specificity of 81.5%).

Conclusion: Excessive maternal weight gain and additional boluses required for epidural analgesia were associated with failure of epidural extension for cesarean section.

OC008. EPIDURAL ANALGESIA DURING OBSTETRIC LABOR: ADMINISTRATION OF PROGRAMMED INTERMITTENT EPIDURAL BOLUS VERSUS CONTINUOUS EPIDURAL INFUSION

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Introduction: Epidural anesthesia is an effective technique for analgesia during obstetric labor. However, the mode of administration, the doses and the molecules used differ. The aim was to compare the effectiveness of programmed intermittent epidural bolus (PIEB) versus continuous epidural infusion (CEI) for the incidence of motor block during labor.

Methods: This was a prospective, randomized study, over a period of 8 months. 56 parturients, ASA II or III, aged > 18 years were included. They received 2 boluses of 8 mL of (isobaric bupivacaine 1.25 mg/mL and sufentanil 0.25 μ g/mL) then randomized into 2 groups: CEI group: (8mL/h adaptable) and PIEB Group: 8 mL hourly and manual boluses if necessary. The primary outcome was motor block (Bromage score). SPSS software was used and a $p < 0.05$ was considered significant.

Results: Demographic and obstetrical characteristics were comparable. Motor block was noted in 37% of the CEI group and 7% of the PIEB group ($p = 0.009$). The full cervical dilatation VAS was 3 [3;5] for the CEI group and 2 [1;3] for the PIEB group ($p = 0.006$). 78% of CEI parturients were satisfied versus 35% with PIEB ($p = 0.007$) during the first stage of labor and 50% versus 14% during the second stage ($p = 0.004$). The hourly and total consumption of bupivacaine and sufentanil, the duration of the second stage of labor as well as the mode of delivery were comparable between the 2 groups.

Conclusion: Programmed intermittent epidural analgesia for obstetric labor decreases motor block frequency, decreases fully dilated VAS and increases maternal satisfaction compared to continuous administration.

OC009. MACHINE LEARNING MODELS TO PREDICT TRANSFUSION REQUIREMENTS IN LUMBAR FUSION SURGERY

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Introduction: Predicting the necessity for blood transfusion during lumbar fusion surgery is essential for the anesthesia management of patients. According to the

literature, the incidence of transfusions in these surgeries ranges from 10% to 30%. Various machine learning models can be employed to forecast this need. This study aims to compare the effectiveness of machine learning algorithms in predicting the transfusion requirement in lumbar fusion neurosurgery.

Methods: This is an observational analytical study with prospective data collection, employing machine learning algorithms to predict the requirement for blood transfusion in patients scheduled for lumbar spine fusion in neurosurgery. The independent variables included known and identified risk factors from the literature. The machine learning models utilized in this study were K-Nearest Neighbors (KNN), Support Vector Classifier (SVC), Decision Trees (DT), Logistic Regression (LR), Random Forest (RF), and Extreme Gradient Boosting (XGBT). The models were implemented in Python using the Anaconda distribution with the Spyder interface and the 'scikit-learn' library. To evaluate model performance, we used various metrics including Accuracy, Precision, Recall, F1 Score, Log-Loss, and ROC-AUC.

Results: The SVC emerged as the best-performing model based on several criteria. It achieved the highest accuracy (0.79), indicating the fewest overall errors. The SVC also had a high ROC_AUC score of 0.71, demonstrating good class distinction capability. However, its precision and recall values suggest weaknesses in predicting positive cases. Although the XGBT has higher precision, its recall is lower.

Conclusion: The SVC could be an appropriate choice to predict transfusion requirements in spinal fusion, although additional adjustments may be necessary.

OC011. CLINICOPATHOLOGICAL PROFILE OF BREAST CANCER IN ELDERLY WOMEN IN NORTH AFRICA

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Introduction: Breast cancer (BC) is the most common malignancy in women. However, management of BC in women older than 70 years is challenging because the disease is highly heterogeneous and lower inclusion of this population in clinical trial. This study aims to examine clinical and histological characteristics of BC in elderly women in a north African population.

Methods: We performed a retrospective analysis of women ≥ 70 years old with BC treated at the North-West oncology center of Jendouba, Tunisia, from January 2015 to June 2021.

Results: We included 56 patients. The average age was 75 years. tumors were classified T2 in 39 % of cases and

N1 in 70% of cases. Neoadjuvant chemotherapy was indicated in 37% of cases. Breast surgery was performed in 47 patients: 30 patients had radical surgery and 17 patients had conservative surgery. Sentinel lymph node detection was only performed in 2 patients. Mean histologic tumor size was 39 mm. Nonspecific invasive cancer was the most frequent histological type. SBR grade III was most prevalent. Axillary lymph node involvement was confirmed in 42% of cases. Hormone receptors were positive in 75 % of cases. Her2-Neu receptors were overexpressed in 23% of cases. Luminal B was the most common molecular subtype.

Conclusion: In the North-West of Tunisia, BC in elderly women is characterized with larger tumor's size and higher rate of positive hormone receptors, which could significantly increase the use of hormone therapy rather than chemotherapy for the management of disease especially in frail women.

OC012. CLINICAL, PATHOLOGICAL AND THERAPEUTIC CHARACTERISTICS OF EPITHELIAL OVARIAN CANCER IN NORTH WEST OF TUNISIA

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Introduction: Epithelial ovarian cancer (EOC) is the seventh most common cancer among women in the world and the leading cause of death from gynecological malignancies. This study aims to describe clinical, pathological and therapeutic characteristics of EOC in a Tunisian population

Methods: We retrospectively conducted a monocentric study including all patients treated for ovarian cancer at the department of medical oncology at the regional hospital of Jendouba, from January 2018 to December 2022.

Results: We included 26 patients. The mean age was 58 years. The main complaint was a persistent pelvic pain in 58% of all cases, followed by abdominal distention. Debulking surgery was performed in 21 patients: 14 patients had primary debulking surgery and 7 patients underwent an interval debulking surgery after neoadjuvant chemotherapy. The procedure was limited to diagnostic salpingo-oophorectomy in 5 patients. We performed conventional cytoreductive surgery, consisting of hysterectomy, bilateral salpingo-oophorectomy, omentectomy, appendectomy, and limited peritonectomy in 19 patients. Maximal cytoreduction (R0) was achieved in 14 patients. Lymphadenectomy was performed in

17 patients. Sixteen patients (61%) had FIGO stage IIIC tumors. Serous carcinoma was the most frequent subtype followed by endometrioid carcinoma. Adjuvant chemotherapy was administered in all operated patients, 9 among them had a second line of chemotherapy. After a median follow-up of 21 months, 9 patients (34%) were in complete remission.

Conclusion: The study of clinical and histological characteristics of EOC in the north west of Tunisia showed no differences to other countries but delay in diagnosis and treatment was associated with lower remission rates.

OC013. PREVALENCE OF SURGICAL COMPLICATIONS AFTER LOW ANTERIOR RESECTION FOR RECTAL CANCER

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Introduction: This study evaluates the prevalence and risk factors for complications following anterior resection for rectal cancer, aiming to identify the frequency and determinants of surgical complications.

Methods: We conducted a retrospective study, including patients who underwent surgery for rectal tumors from 2013 to 2023.

Results: The study included 60 patients. The mean age was 56 years. The tumors were located in the upper rectum (33%), middle rectum (48%), and lower rectum (19%). Neoadjuvant chemoradiotherapy was indicated for 63% of patients, while adjuvant chemotherapy was given to 15%. All patients were operated on via the midline approach. The anastomosis performed was colorectal in 78% and coloanal in 22% of cases, all of mechanical side-to-end type. A protective ileostomy was performed in 78% of patients. The mean time to restoration of bowel continuity was 8 months. Thirty patients (50%) experienced postoperative complications. These included anastomotic leakage (15%), intra-abdominal collection (13%), anastomotic stenosis (7%), anastomotic fistula (7%), hemorrhage (5%), and rectovaginal fistula (3%). Significant risk factors for postoperative complications included age over 50 years ($p < 0.001$), active smoking ($p = 0.013$), and an ASA score of 2 or higher ($p = 0.001$). A BMI of 22 g/m² or higher and cardiovascular disease were significantly associated with the occurrence of anastomotic leakage ($p = 0.02$ and $p = 0.013$, respectively).

Conclusion: Our study emphasizes the importance of vigilant and proactive management for older patients, active smokers, and those with higher ASA scores undergoing anterior resection for rectal cancer.

OC014. CLINICAL AND HISTOPATHOLOGICAL FEATURES OF BILATERAL BREAST CANCER: EXPERIENCE OF SECTORIAL CENTER OF ONCOLOGY IN JENDOUBA

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Introduction: Bilateral breast cancer (BBC), occurring either as a synchronous or metachronous disease, represents a challenging clinical entity. Our study aims to define the Clinical and histopathological features of BBC in the north west of Tunisia.

Methods: We conducted a retrospective study of patients with BBC treated at the Sectoriel Center of Oncology in Jendouba from 2019 to 2022.

Results: We included 13 female patients. The median age was 52 years old. A family's history of breast cancer was noted in 4 patients. Nine patients presented with synchronous disease. The primary cancer was detected by breast self-examination in all cases. The contralateral cancer discovered on the mammography in 10 cases. Neo-adjuvant chemotherapy was administered in 8 patients. Surgery was performed in all cases: 10 patients underwent bilateral radical surgery. The mean tumor size was 33 mm. The most common histological type was nonspecific type carcinoma. Hormone receptors were positive in 11 primary tumors and 10 contralateral cancer. HER2 status was over expressed 4 cases of BBC. The predominant molecular subtype was Luminal B in primary and contralateral tumors. All the patients had received adjuvant radiotherapy. With a median follow-up of two years, 10 patients remained disease-free, whereas 3 patients developed metastatic recurrences.

Conclusion: In most cases of BBC, the second cancer is identified at an early stage supporting the importance of contralateral breast screening at the time of primary diagnosis and during follow-up. These patients require individualized treatment based on tumors characteristics.

OC015. A CROSS-SECTIONAL STUDY ON THE NURSE'S ROLE IN EDUCATION AND MANAGEMENT OF OSTOMY CARE

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Introduction: The examination of diverse aspects of care for ostomy patients holds significant clinical relevance, as the proficiency and knowledge of nurses directly impact the quality of patient education and their satisfaction with the care provided. The aim of this study was to assess the level of knowledge among nurses in surgical oncology units concerning the care and management of intestinal ostomies.

Methods: This cross-sectional study was performed at teaching hospitals (Salah Azaiz Institute and military hospital of Tunis) from march to may 2024 . The study population involved nurses, who were working in surgery departments. The data collection tool included a researcher-developed survey titled "Assessment of Nurses' Knowledge in Ostomy Care."

Results: Thirty nurses were involved in our study. Eighty percent of nurses reported educating patients on care procedures, 64% providing detailed explanations and 83% involving family members in the education process. However, only 23% of nurses informed patients about the normal appearance of a stoma, which is essential for early detection of complications. Training for daily living, including familiarization with necessary equipment and dietary advice, was provided by 73% of nurses. However, Only 9% of nurses offered an emergency contact.

Conclusion: While many nurses are proactive in patient education, there is a need for more comprehensive training and resources, particularly in preparing patients for potential complications and ensuring psychological support.

OC016. PERCEPTIONS OF HEALTHCARE AMONG OSTOMY PATIENTS: A CROSS-SECTIONAL STUDY

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Introduction: The quality of communication and the information exchanged between ostomy patients and healthcare providers significantly affects their quality of life. We aim to describe ostomy patients' perspectives on the healthcare they receive for enhancing the healthcare system.

Methods: This cross-sectional study was performed at Salah Azaiz Institute from march to may 2024. We assessed socio-demographic data and the life experiences of patients with intestinal ostomies.

Results: The study involved 30 patients, comprising 19 males and 11 females, with an average age of 40.9 years. Most participants were married (67%) and from a low socioeconomic background (50%). Half had a secondary education level, with 67% unemployed. The predominant type of digestive stoma was colostomy (83%), primarily due to colon cancer (79%). About 34% had stomas for over 48 weeks, and 57% used a one-piece appliance system. Complications were reported by 23%, mainly skin irritation (57%). Most patients received pre- and post-surgery education (90%), and 80% were informed both pre- and post-surgery. The average satisfaction score was 4.48/5, with 57% acceptance and 50% adaptation to their stoma. Regarding new care materials, 50% were informed by general practitioners, 43% by nurses, and 7% through the internet. Post-stoma, 77% of patients changed their clothing choices, and 70% modified their diet. A significant

number experienced anxiety or depression (63%), while 45% resumed daily activities, and 38% returned to work.

Conclusion: The nature of the information provided plays an essential role in helping patients adapt to their new situation and return to normal life.

OC017. GASTROINTESTINAL STROMAL TUMOR OF THE COLON AND RECTUM: A CASE SERIES

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Introduction: Gastrointestinal stromal tumors(GIST) are rare, accounting for only 0.1% to 0.3% of all gastrointestinal tumors. They commonly occur in the stomach (60% of cases) and the small bowel (35% of cases). GIST can be found in other parts of the digestive tract, with less than 5% of cases occurring in the colon and rectum. The clinical presentation can vary widely. CT scan is the gold standard not only for diagnosis and staging but also for prognosis and surveillance. Our study aims to present our experience with colorectal GISTS.

Methods: We report four cases of colorectal GIST treated in Charles Nicolle Hospital of Tunis over a period of 15 years from January2009 to December2023.

Results: The mean age was 55 years. None of them had a family history. The main symptom was abdominal pain. Two had rectal bleeding. An abdominal mass was found in three patients. CT-scan was performed in all cases with a median tumor size of 80mm with no signs of metastasis. After colonoscopy, it was determined that three patients had tumors in the left colon, while one patient had a rectal tumor. The diagnosis was confirmed by biopsy and all of them underwent surgery. The histological examination showed positive CD117 in all cases. The median follow-up was 26 months, during which one case of recurrence was observed. This patient required adjuvant therapy.

Conclusion: The diagnosis of colorectal GIST can be challenging. The treatment depends on various factors such as tumor size, stage, and metastases. Managing this condition requires a multidisciplinary approach.

OC018. EVALUATION OF NURSES' KNOWLEDGE ON BLOOD TRANSFUSION

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Introduction: The knowledge and skills of healthcare professionals are essential for ensuring the quality and safety of blood transfusion procedures. The aim of this study is to assess the of Nurses' Knowledge on Blood Transfusion

Methods: This was a descriptive cross-sectional study that included nurses from the surgical unit of Salah Azaiz Institute, conducted from March to April 2024. Data were collected using a questionnaire consisting of two sections: The first section for descriptive information about the nurses and the second section focused on assessing knowledge related to blood transfusion.

Results: The study involved 30 nurses, with an average age of 41 years. It revealed that 53% of nurses found blood transfusion procedures challenging, with a majority performing between 1 to 5 transfusions daily. Most nurses (90%) accurately identified packed red blood cells as a labile blood product, and 98% were aware of the mandatory serologies for HIV and hepatitis B and C. Prior to transfusion, 87% emphasized the importance of thorough testing, including blood group verification and cross-matching. The ultimate bedside test was deemed legally necessary by 80% of nurses. Patient monitoring during transfusion was essential, with 80% advocating for continuous observation for the first 15 minutes. All nurses agreed on the necessity of obtaining informed consent, and practices varied regarding pre-transfusion labeling and preparation, with only 60% checking blood bag compatibility immediately.

Conclusion: Our study identified knowledge gaps that could potentially compromise patient safety. Continuous training programs appear to be mandatory to update the knowledge of nurses.

OC019. ALLOGENEIC HEMATOPOIETIC STEM CELL TRANSPLANTATION ACTIVITY IN TUNISIA: A REPORT FROM THE NATIONAL BONE MARROW TRANSPLANT CENTER OF TUNISIA

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Introduction: Allogeneic hematopoietic stem cell transplantation (allo-HSCT) remains the curative treatment for several hematological diseases. The objective of the study was to evaluate the outcomes of allo-HSCT over the past three years.

Methods: Descriptive retrospective study including patients who received allo-HSCT from matched sibling donors between 2020 and 2023. Conditioning regimens were TBI or busulfan-based for malignant diseases and antithymocyte globulin and cyclophosphamide +/- fludarabine for aplastic anemia (AA). Graft sources were bone marrow (BM) or peripheral blood stem cells.

Results: A total of 129 patients were included. The median age was 27 years (5-55y). Underlying diseases were acute lymphoblastic leukemia (35%) of patients, acute myeloid leukemia (28%), AA (19%) and other

diseases (30%). Conditioning regimen was TBI-based in 22% of cases. Graft source was BM in 70% of patients. Engraftment was observed in 98% of patients. Acute GvHD occurred in 48% of patients with grade III-IV in 12% of cases. Chronic GvHD was observed in 43% of patients. Cytomegalovirus reactivation(s) was observed in 50% of patients, hemorrhagic cystitis (18%), thrombotic microangiopathy (8%), sinusoidal obstruction syndrome (4%), PRES syndrome (1.5%). The non-relapse mortality rate was 15%, mainly due to GVHD (25%) and infectious complications (25%). After a median follow-up of 29 months (14-49m), the relapse rate for malignant diseases was 23%. The overall survival in AA, AML and ALL was 92, 78 and 66%, respectively and the event-free survival was 80, 76 and 63%, respectively.

Conclusion: Our Results were comparable with the literature despite limited resources.

OC020. ALLOGENEIC HEMATOPOIETIC STEM CELL TRANSPLANTATION IN ADULT ACUTE MYELOBLASTIC LEUKEMIA: SURVIVAL AND RELAPSE

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Introduction: Allogeneic hematopoietic stem cell transplantation (allo-HSCT) is the standard treatment of high-risk acute myeloid leukemia (AML). The objective was to estimate the cumulative incidence (CI) of relapse and non-relapse-related mortality (NRM), overall survival (OS), event-free survival (EFS).

Methods: A retrospective descriptive study was carried out on adult patients with AML who received allo-HSCT between 2011 and 2020. Conditioning consisted of busulfan and cyclophosphamide or fludarabine and busulfan. The graft source was bone marrow or peripheral blood stem cell (PBSC).

Results: A total of 109 patients were included, with a median age of 34 years (18-50 years). At diagnosis, 21% of patients had high-risk AML. The median diagnosis-transplant time was 5 months (3-121 months). Before allo-HSCT, 89% of patients were in CR1. The graft source was PBSC in 62% of cases. The CI of acute \geq grade II and chronic GVHD was 28% and 59%, respectively. The 3-year CI of relapse was 21%, with a median time to onset of 12 months. Sixteen among the 27 relapsed patients received salvage treatment. Five patients underwent a second allo-HSCT. At the last follow-up, 4 patients are alive in CR. The 3-year CI of NRM was 12%. After a median follow-up of 36 months (49 days – 9 years), OS, EFS were 68%, 66%, respectively.

Conclusion: The outcomes of allo-HSCT in young adults with AML can be improved by better knowledge of the molecular profile, the assessment of residual disease, and the introduction of targeted therapies.

OC021. PARTICULARITÉS ÉPIDÉMIOLOGIQUES DE LA MALADIE VEINEUSE THROMBOEMBOLIQUE PARANÉOPLASIQUE EN GÉRIATRIE

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Introduction: L'objectif de notre travail était de déterminer les particularités des TVP associées aux néoplasies chez le sujet âgé.

Methods: Etude rétrospective de sujets âgés ≥ 65 ans pris en charge pour une TVP compliquée ou non d'une embolie pulmonaire (EP) associée à une néoplasie déjà connue ou nouvellement diagnostiquée, menée au sein du service de Médecine Interne B de l'hôpital Charles Nicolle sur une période de 16 ans allant de l'année 2000 à 2016.

Results: Un cancer déjà connu s'était compliqué de MVTE chez 20 patients et une MVTE a révélé la néoplasie chez 20 patients. L'âge moyen de nos patients était de 76,87 ans (genre ratio : 2,07). L'immobilisation prolongée (35 %) était le facteur de risque le plus fréquent. Les cancers solides ont été retrouvés (82,5%) et les hémopathies malignes (17,5%). Les cancers solides les plus fréquents étaient urologiques (40%) avec en première position la prostate et digestifs (20%). Pour les hémopathies malignes, il s'agissait surtout du myélome multiple chez 10% des patients. Le type histologique le plus fréquent était l'adénocarcinome (86,5%). Les métastases ont été constatées chez 30% de nos patients. Une TVP des membres inférieurs a été retrouvée dans 90% des cas, proximale étendue chez 40% des cas. Une TVP insolite a été notée chez 5 patients (12,5%). Une embolie pulmonaire a compliqué l'évolution de la TVP chez un seul patient.

Conclusion: Les néoplasies les plus thrombogènes étaient représentées par celles les plus fréquemment retrouvées dans la population.

OC022. RECURRENT THROMBO-EMBOLISM: PREVALENCE AND RISK FACTORS.

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Introduction: Venous thromboembolism (VTE) is a major health problem. Identifying the risk of recurrence determines the treatment duration. This study aimed to assess the prevalence of recurrent VTE in a Tunisian cohort and the risk factors of recurrence.

Methods: Retrospective, descriptive study enrolling medical records patients admitted, for the treatment of VTE, to the internal medicine department at the Rabta University, over 18 years [2000-2018].

Results: The study included 1711 patients: 910 men (53.2%) and 801 women (46.8%). The mean age was 55 years \pm 18.38 [16-100]. VTE events were predominantly

provoked N=1588 (92.8%). Unprovoked and idiopathic VTE were found in 123 cases (7.2%). Recurrent VTE occurred in 176 patients (10.3%). Recurrent episodes happened: once (N=129), twice (N=30), three times (N=3) and four times (N=1). Sixty-seven patients had a recurrent VTE while taking vitamin K antagonists. Recurrent VTE was observed in 11 patients (6.2%) with unprovoked VTE and 165 patients (93.8%) with provoked VTE: obesity N= 36, Behçet's disease N=35 (P=0.000), immobilization N=25, neoplasia N= 25, surgery before one episode N= 11, venous insufficiency of the lower limbs N=11, stroke N=8, cardiac insufficiency N=8, protein C deficiency N=7, activated protein C resistance N= 5, cast in the lower limb N=5, protein S deficiency N=4, antithrombin deficiency N=4, antiphospholipid syndrome N=3, systemic lupus erythematosus N=3, and N= 1 in each of: Sjogren's syndrome, oestrogen-progestin contraceptive, Leo-Burger disease, obstructive bronchopathy, post-partum, catheter.

Conclusion: Recurrent VTE can be rare yet dangerous. The main risk factor of recurrence in our series is behçet's disease.

OC024. PREDICTIVE FACTORS FOR THE OCCURRENCE OF ACUTE HEART FAILURE DURING NSTEMI

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Introduction: NSTEMI is a common reason for hospitalization in the emergency department. Their evolution can be burdened by acute complications, including acute heart failure. The objective of this work is to determine the predictive factors for the occurrence of left ventricular failure in the NSTEMI

Methods: Descriptive study conducted over a period of 4 months. Patients hospitalized in the emergency department for NSTEMI were included

Results: Inclusion of 120 patients hospitalized for NSTEMI. The mean age was 61 years \pm 11 years with extremes ranging from 32 to 88 years. The main antecedents were: hypertension (57.5%), diabetes (53.3%), dyslipidemia (36.5%), coronary insufficiency (43.3%) with angioplasty (19%). The main reasons for consultation were: chest pain (99; 82.5%) and dyspnea (16; 13.3%). Repolarization disorders: ST subshift (57.5%), transient ST shift (18.3%), negative T waves (24.2%), biphasic T waves (5.8%). The main territories affected were: the lower territory (36.7%), the anterior (15.8%), apico-lateral (16.7%), the infero-basal (14.2%) territory. The course was marked by complications in 23 patients In univariate analysis, the factors associated with the occurrence of left ventricular failure in the NSTEMI were: previous clopidogrel treatments (p=0.028), statin (p=0.016), SBP (p=0.05), heart rate (p=0.008), SpO2 (p=0.000), Glasgow score (p=0.000), ST-segment subshift repolarization disorders (p=0.033), negative T wave (p=0.012), Hemoglobin (p=0.021), AST (p=0.03), ALT (p=0.024), TP (p=0.022), INR (p=0.003)

Conclusion: NSTEMI SCA has been likely to progress to cardiovascular complications in the acute phase. Identification of patients at risk as well as optimal management of these complications improves the prognosis.

OC025. DEVELOPMENT OF A TUNISIAN SCORE TO PREDICT NON-RETURN TO WORK AFTER MYOCARDIAL INFARCTION

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Introduction: Returning to work after a myocardial infarction (MI) is crucial for a patient's well-being, particularly for younger individuals. This study aimed to identify factors hindering return to work and develop a score to predict this outcome in a Tunisian population.

Methods: This cross-sectional study was conducted in the cardiology department of Charles Nicolle Hospital (Tunisia) between January 2019 and December 2021. 210 patients were enrolled.

Results: Low socio-economic status, previous bypass surgery, heart failure, high filling pressures, complicated MI, job dissatisfaction, physically demanding jobs, low education level, and hypertension were identified as significant predictors of non-return to work (all p-values < 0.05). Additionally, persistent fatigue, dyspnea, and chest pain after MI further decreased the likelihood of returning to work (all p-values < 0.003). To enhance psychosocial support, a scoring system was developed to estimate the risk of not returning to work. A score of ≥ 3 indicates a 16-fold increased risk. The score demonstrated an 83% sensitivity, 60% specificity, and an AUC of 0.632. Key factors contributing high points to the score include prior bypass surgery, heart failure, and anginal recurrence.

Conclusion: A multidisciplinary approach involving cardiologists, occupational physicians, employers, psychologists, and patients is essential to achieve optimal physical, psychological, and economic recovery after MI. This newly developed score can aid in risk stratification and guide patient management.

OC026. IMPACT OF ILLICIT DRUG USE ON CLINICAL PRESENTATION AND OUTCOMES OF ACUTE MYOCARDIAL INFARCTION IN TUNISIA

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Introduction: Illicit drug use (IDU) is associated with an increased risk of acute myocardial infarction (AMI). However, limited data exists on the impact of substance use on the clinical presentation, management, and outcomes of AMI patients. The study aimed to investigate the association between IDU and AMI characteristics in a

Tunisian population.

Methods: A retrospective, single-center study compared AMI patients with and without IDU between January 2019 and June 2023. Groups were matched for age, sex, and traditional cardiovascular risk factors. Clinical, echocardiographic, and angiographic data were analyzed.

Results: The study included 92 patients (46 per group), with a mean age of 39.39 ± 8.62 years. IDU patients were more likely to be illiterate ($p=0.004$) and had higher systolic and diastolic blood pressure, heart rate, peak troponins, and leukocyte count compared to non-IDU patients ($p<0.05$ for all). Global longitudinal strain was lower in IDU patients ($p=0.003$). Coronary spasm and no-reflow were more frequent in the IDU group ($p<0.05$). Additionally, IDU patients had fewer coronary collaterals and required longer anticoagulation ($p<0.05$).

Conclusion: IDU is associated with a distinct AMI phenotype characterized by younger age, higher cardiovascular risk, more severe myocardial injury, and adverse coronary angiographic findings. These findings highlight the need for tailored management strategies for AMI patients with IDU.

OC027. INTERESTS OF ISCHEMIC SEVERITY SCORES DURING ACUTE CORONARY SYNDROME NSTEMI: GRACE, TIMI, EDACS SCORES

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Introduction: Ischemic heart disease is a common pathology when it comes to emergency department consultations; the diagnosis is most often easy and the treatment is well codified. The severity of the ischemic picture varies depending on several factors.

Objective: determine risk factors associated with elevated ischemic risk in acute coronary syndrome without ST segment elevation in patients admitted to the emergency department

Methods: This is a single-center prospective descriptive study which took place over a period of 12 months in the emergency department. Inclusion criteria: Age over 18, both genders Non-inclusion criteria: Patients admitted in cardiorespiratory arrest We individualized two groups according to the degree of severity of ischemic score (EDACS, TIMI, Grace): a low to moderate risk group (risk -) versus a high-risk group (risk +).

Results: One hundred and twenty patients were collected; for the Grace score group: mean age (years) ($p=0.000$); gender -ratio ($p=0.331$); medical history ($p=0.000$); under ST shift ($p=0.000$); lower territory ($p = 0.042$); anterior territory ($p=0.025$); PAS ($p=0.013$); Spo2 ($p=0.042$), deaths ($p=0.492$). For the TIMI score group: average age ($p=0.000$); gender -ratio ($p=0.331$); hypertension ($p=0.000$); Coronary ice ($p=0.000$); dyslipidemia ($p=0.039$); previous revascularization ($p=0.001$); under ST shift ($p=0.001$); OAP ($p=0.009$); deaths ($p=0.317$). For the EDACS score group: age ($p=0.000$); gender ratio ($p=0.002$); hypertension ($p=0.002$); diabetes ($p=0.014$);

coronary ice ($p=0.010$); PAD ($p=0.030$); Spo2 ($p=0.017$); acute complications ($p=0.033$). Multivariate study, Grace group: age ($p=0.000$) and HR ($p=0.027$); TIMI group: age ($p=0.000$) and under ST shift ($p=0.000$).

Conclusion: The main factor for elevated ischemic risk in acute coronary syndrome is age

OC028. PREDICTIVE FACTORS OF ADVERSE OUTCOMES OF ATRIAL FIBRILLATION IN PATIENT: RESULTS OF THE NATIONAL TUNISIAN REGISTRY OF ATRIAL FIBRILLATION (NATURE-AF)

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Introduction: AF is the most frequent sustained cardiac arrhythmia. Data related to its characteristics in elderly in Tunisia remain scarce. We aimed to evaluate the predictive factors of adverse outcomes in elderly at 12 months follow-up among AF patients in Tunisia including thromboembolic (TE) events, hemorrhagic events, and all-cause death.

Methods: We conducted a national, prospective and analytic multicentric study based on NATURE-AF with a 12-month follow-up period between March 1 and May 31, 2017. We evaluated the predictive factors of adverse outcomes in elderly (aged ≥ 75 years old).

Results: We included 915 patients with AF. Elderly represented 24% of the population. Females represented 52% of elderly. Hypertension was present in 57%, diabetes mellitus in 22.4%, dyslipidemia in 16%, obesity in 75.8% and chronic kidney disease in 22.8%. Prior TE and hemorrhagic accidents happened in 12.8% and 3.7% respectively. The mean CHA2DS2-VASc score was 3.92 ± 1.28 . Vitamin-K-Antagonist was used in 59.8%. The mean TTR was 47.53 ± 26.78 . The rate control strategy was adopted in 68% of patients using beta-blockers in 37.9%. Hospitalization during the follow-up for adverse causes occurred in 13.4%. Adverse outcomes occurred in 19.6% including 3.2% TE events, 5% hemorrhagic events, and 11.4% deaths. After multivariate analyses, prior TE accidents (ORa=3.218; $p=0.025$; 95%CI [1.157-8.946]) and hospitalization during follow-up (ORa=6.489; $p=0.002$; 95%CI [2.035-20.697]) were independent prognostic factors of adverse outcomes.

Conclusion: Prior TE accidents and hospitalization during follow-up are predictive factors of adverse outcomes in elderly with AF. Identifying them is crucial to enhancing public health strategies and lowering healthcare costs.

OC030. THEOPHYLLINE INTOXICATION: CLINICO-BIOLOGICAL CHARACTERISTICS AND STUDY OF THE CORRELATION BETWEEN CLINICAL SIGNS AND PLASMA DOSAGE

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Introduction: Theophylline belongs to the xanthine family and is used for its bronchodilator effect. Theophylline intoxication is rare. The aim of our study was to study the correlation between clinical manifestations and plasma levels of theophylline intoxication.

Methods: This was a retrospective study including all patients admitted for acute severe theophylline intoxication in the intensive care unit over a period of eleven years (from 2013 to 2023).

Results: During the study period, 103 patients were admitted for theophylline intoxication. The median age was 20 years [17-28] and they were predominantly female. Respiratory history was represented by asthma in 19 cases (18.4%) and chronic obstructive pulmonary disease in 9 cases (8.7%). Intoxication was voluntary in 93 cases (90.3%), with a median time between ingestion and admission of 5 hours [3-9]. Digestive symptoms were present in 92 cases (89.3%), tachycardia in 90 patients (87.4%), tremors in 21 patients (20.4%), agitation in 10 patients (9.7%), seizures in 4 patients (3.9%) and shock in 7 patients (6.8%). Lactic metabolic acidosis was present in 51 patients (59.3%) and Hypokalemia in 84 patients (82.4%), with electrical manifestations in 37 cases (36.3%). The median theophylline level was 38 mg/L [28.7-60]. beta blockers were used in 60 cases (58.5%). A close correlation was found between theophyllinemia and heart rate ($p=0.000$), bicarbonate levels and kalemia, with p values of 0.009 and 0.001 respectively. No deaths were recorded in our study group.

Conclusion: Tachycardia, hypokalemia and metabolic acidosis correlate with the severity of theophylline intoxication.

OC031. ACUTE POISONING IN ELDERLY PATIENTS IN A TOXICOLOGY INTENSIVE CARE UNIT: EPIDEMIOLOGY AND OUTCOME

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Introduction: By 2030, people aged 60 or over are expected to represent nearly 18% of the Tunisian population. Few studies were conducted describing acute poisoning in elderly patients. The objective of our study was to describe the epidemiological, clinic-biological, therapeutic and evolutionary features of poisoning in elderly patients

Methods: It was a retrospective, descriptive, observational study of patients aged more than 65 years who required hospitalization in the medical intensive care unit for acute poisoning over a 16-year period from January 2007 to December 2022.

Results: Three hundred patients were included. The mean age was 71 ± 7 years with a gender ratio of 0.91. The most frequent comorbidities were: hypertension (43.3%) and diabetes (26.7%). Poisoning severity was moderate in 113 patients (38%) and severe in 98 (25%). Poisoning

was deliberate self-harm in 50% of cases (n=150), mainly due to drugs (65.3%), followed by organophosphates. The most common drugs were psychotropics and anti-hypertensive medications. Carbon monoxide (CO) was the main cause of accidental poisoning (59.5%). Chemical submission was found in 8 patients. Seventy-three patients (24.3%) developed coma requiring invasive ventilation. The most frequent laboratory abnormalities were: high white blood cell count (40.7%), followed by anemia (28%) and hypokalemia (24%). The mean length of stay was 3 ± 2 days. Thirteen patients died with a mortality rate of 4.3%. In multivariate analysis, the independent risk factors of mortality were rhythm disorders ($p=0.007$), septic shock ($p=0.001$) and cardiogenic shock ($p=0.001$).

Conclusion: Poisoning in the elderly is becoming increasingly frequent, mostly voluntary, with a significant mortality rate.

OC032. LUNG ULTRASOUND CONTRIBUTION IN ACUTE RESPIRATORY FAILURE MANAGEMENT IN TOXICOLOGY INTENSIVE CARE UNIT

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Introduction: Acute respiratory failure (ARF) is a frequent cause of admission in intensive care unit (ICU). Lung ultrasound is a new non-invasive exam which can be performed at the bedside of critically ill patient. It is less harmful than chest X Ray. The aim of our study was to assess the value of thoracic ultrasound in the management of ARF in a toxicology ICU

Methods: Cross-sectional prospective study in a toxicology ICU from the January to December 2022 on patients admitted for intoxication and who presented an ARF on admission or during their stay

Results: Sixty-five patients were enrolled. The incidence of ARF was 8.92%. The mean age was 45.02 ± 15.74 years, with a sex ratio of 0.72. ARF was associated with pneumonitis, pulmonary embolism, atelectasis, Pulmonary edema, pneumothorax and pleural effusion in 43,17, 15, 14, 8 and 3% respectively. Lung ultrasound was consistent with the final diagnosis in 85% of cases ($k=0.794$). In 18% of cases, lung ultrasound allowed an urgent diagnosis. The sensitivity and specificity of lung ultrasound for the etiological diagnosis of ARF were 84.61% and 99.4% respectively. Its accuracy was different according to the etiology, with sensitivities of 100, 27.27, 90, 88.88, 100 and 100% respectively for the diagnosis of pneumonitis, pulmonary embolism, atelectasis, pulmonary edema, pneumothorax and pleural effusion. Specificities were 94.59% for pneumonitis and 100% for other conditions.

Conclusion: Lung ultrasound is a reliable and accurate for prompt etiological diagnosis of ARF. It's an easy technique to perform and implement in ICUs.

OC034. BETA-CATENIN EXPRESSION IN COLORECTAL CARCINOMAS

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Introduction: In Tunisia, as well as globally, colorectal cancer (CRC) represents a significant public health issue. Over the past decade, substantial progress in the understanding of the human genome has led to a better comprehension of the colorectal carcinogenesis process. It has been demonstrated that aberrant activation of Wnt/ β -catenin signaling plays a role in the pathogenesis and progression of CRC.

Methods: We conducted a retrospective study involving 72 cases of CRC treated between 2011 and 2014. β -catenin immunostaining was considered positive if there was cytoplasmic or nuclear immunoreactivity in more than 10% of tumor cells or a loss of normal membrane expression in more than two-thirds of tumor cells. This expression was correlated with various clinical (age, sex, tumor location) and pathological parameters (tumor size, differentiation, pTNM stage, vascular invasion, perineural invasion).

Results: Results showed a significant correlation between cytoplasmic or nuclear β -catenin staining and tumor size ($P = 0.016$ and 0.007 , respectively). However, no correlation was found between the loss of membrane β -catenin expression and tumor size ($p = 0.26$). Cytoplasmic overexpression of β -catenin was inversely proportional to tumor grade and lymph node metastasis. The majority of cytoplasmic β -catenin positive tumors were low grade ($n = 46/53$, 87%) and did not exhibit lymph node metastasis ($n = 31/53$, 58%). The correlation was statistically significant ($p = 0.025$ and 0.04 , respectively). β -catenin immunoreactivity did not correlate with sex, age, degree of differentiation, tumor stage, vascular invasion, or perineural invasion.

Conclusion: Cytoplasmic β -catenin expression appears to be associated with a favorable prognosis in CRC.

OC035. MANAGING ACUTE CHOLECYSTITIS IN THE ELDERLY

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Introduction: Surgical or conservative treatment are two controversial alternatives for elderly patients with acute cholecystitis. The aim of our study was to describe our experience in the management of elderly patients with cholecystitis who had undergone cholecystectomy.

Methods: This descriptive study included 50 patients aged over 65 years, operated for acute cholecystitis in our surgical department, from January 2020 to December

2023.

Results: The mean age of the patients was 72 years, with a maximum of 88 years. According to the Tokyo classification, there were 39 grade 1 patients (78%), 8 grade 2 patients (16%) and 3 grade 3 patients (6%). Management was in the surgical intensive care unit for 13 patients (26%). Only 2 patients required catecholamines. Laparotomy was the most commonly used approach (57%). Intraoperative findings included localized peritonitis in 7 patients (14%), peri-vesicular abscess in 10 patients (20%), hydrocholecystitis in 20%, emphysematous gallbladder in 13 patients (26%) and gangrenous gallbladder in 13 patients (26%). All patients underwent total cholecystectomy. Total Morbidity was 20%. Five patients had early non-specific complications: 2 patients had wall abscess, 2 patients had decompensated their defects: hypertension and respiratory failure and 1 patient had multivisceral failure. In terms of specific complications, 2 patients had postoperative peritonitis and 3 patients had a well-drained external biliary fistula. Mortality was 3%. Two patients had choleperitoneum with multi-visceral decompensation. The third patient died from decompensation of his defects

Conclusion: Surgical treatment remains an effective alternative in the treatment of acute cholecystitis in older patients.

OC036. LAPAROSCOPIC EXTRAMUCOSAL HELLER MYOTOMY IN THE TREATMENT OF PRIMARY ACHALASIA: A STUDY OF 30 CASES

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Introduction: Primary achalasia, is an idiopathic motor disorder of the esophagus characterized by the absence of propagated contractions in the body of the esophagus and a failure of the lower esophageal sphincter to relax in response to swallowing. To date, no treatment can correct the physiological alterations responsible for achalasia, but the available therapeutic options aim to reduce the pressure of the lower esophageal sphincter.

Aim: Discuss the outcomes of Heller myotomy.

Methods: This is a descriptive retrospective study including 30 cases conducted over an 11-year period from January 2008 to December 2019.

Results: Our series consisted of 15 men and 15 women, resulting in a sex ratio of 1:1. All our patients underwent esophageal manometry. This examination showed: Hypertonia of the lower esophageal sphincter in 27 patients, Normotonic sphincter in 3 patients, Esophageal aperistalsis in 29 patients, Inverted esophagus-stomach gradient in 9 patients. Twelve patients initially received endoscopic treatment. All our patients underwent surgical treatment, with each receiving a laparoscopic Heller myotomy. An anti-reflux procedure was performed in 21 patients. Among the 18 patients who underwent primary surgery, the success rate was 77%.

Conclusion: Laparoscopic extramucosal Heller myotomy has become the standard treatment for primary achalasia, providing excellent and durable Results.

OC037. ABDOMINAL WALL ENDOMETRIOSIS: A BICENTRIC STUDY THROUGH 15 YEARS

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Introduction: Endometriosis is a gynecological disorder characterized by the presence of endometrial tissue outside the uterine cavity. Although endometriosis typically occurs in pelvic sites, it can also be found outside the pelvis. It can be found in the lungs, brain, bowel, and abdominal wall. Abdominal wall endometriosis is a rare condition. The diagnosis could be challenging. However, it should be considered in women of reproductive age presenting with cyclic symptoms. This study aims to describe this uncommon entity and highlight the clinical presentation that every physician should know

Methods: We reviewed the records of twenty patients diagnosed with scar endometriosis seen in both departments of Surgery A21 in the Charles Nicolle Hospital Tunis and the Department of General Surgery in the regional hospital of Jendouba, Tunisia from 2009 to 2023.

Results: We included 20 cases of abdominal wall endometriosis during 15 years. The mean age was 35 years. 16 patients had a history of cesarean section. None of the patients had a known history of pelvic endometriosis. The mean interval between surgery and the first symptoms was 2 years (1-7 years). All patients described cyclic pain and the appearance of subcutaneous mass, and three noticed cyclic bleeding from the nodular mass. All patients underwent surgical excision of the mass. The histological examination has confirmed the diagnosis of scar endometriosis in all cases.

Conclusion: Abdominal wall endometriosis could be a dilemma for the surgeon. Its incidence has been increasing due to the rising rates of cesarean sections. However early diagnosis provides adequate medical care.

OC038. COLECTOMY FOR SEVERE ACUTE COLITIS IN INFLAMMATORY BOWEL DISEASE: ANALYSIS OF 38 CASES

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Introduction: Subtotal colectomy is the standard treatment for severe corticosteroid-resistant exacerbations of ulcerative colitis or Crohn's disease. Optimal timing of the surgery is crucial: early intervention may be unnecessary,

while delayed intervention increases postoperative mortality Aim : This study aims to evaluate clinical, biological, and endoscopic data and assess surgical indications and postoperative complications

Methods: This is a retrospective study of 38 cases collected from January 1 ,2000, to December 30, 2021, of patients who underwent emergency subtotal colectomy for severe acute colitis.

Results: The study included Crohn's disease (8 cases), ulcerative colitis (27 cases), and unclassified inflammatory colitis (3 cases). 23 patients had no prior inflammatory bowel disease history(were admitted with severe acute colitis based on clinical) Intravenous corticosteroids were administered to all except one patient with pancytopenia. Surgical indication was based on medical treatment failure Surgery was performed within 8 to 14 days. 14 patients underwent laparoscopic subtotal colectomy and 24 had median laparotomy The procedure involved subtotal colectomy, left sigmoidostomy, and right ileostomy. Complications included 4 non-specific cases (2 deep vein thromboses, 1 pulmonary embolism, 1 urinary infection).

Conclusion: Despite advances in pharmacotherapy, colectomy remains a common intervention for severe acute colitis. Laparoscopic techniques have significantly improved postoperative outcomes. Delayed surgery can exacerbate operative challenges and increase complication risks.

OC039. OUTCOMES OF ACUTE APPENDICITIS IN ELDERLY

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Introduction: Improved healthcare and longer life expectancy have led to a growing elderly population, resulting in a rise in cases of acute appendicitis among this population. Delayed diagnosis or surgery increases morbidity and mortality rates by up to 10% and 5% respectively. In this study, we aim to present our experience with the outcomes of acute appendicitis in elderly patients.

Methods: Medical records of patients over the age of 65 years diagnosed with acute appendicitis who underwent appendectomy between 2019 and 2023 were analyzed.

Results: 61 patients over 65 years of age presenting with abdominal pain were hospitalized for diagnosis and treatment. Appendectomy was performed in all patients. Laparoscopic appendectomy was performed in 42 of these patients. Perforation rate and morbidity were 67,2% and 34,4%, respectively. Out of the 21 patients who experienced postoperative complications, nine had complications related to the surgical site, 10 had non-surgical site complications, and two patients experienced both types of complications. Nine patients needed ICU admission and there was no mortality.

Conclusion: Acute appendicitis is a worldwide problem that can occur at any age with increased morbidity and mortality in geriatric patients. Further studies are needed

to prevent morbidity and mortality and find prognostic factors specific to the elderly population.

OC040. AAST GRADING SYSTEM OF ACUTE APPENDICITIS IN ELDERLY: CORRELATION BETWEEN IMAGING AND SURGICAL FINDINGS

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Introduction: Determination and reporting of disease severity in emergency general surgery lacks standardization. Recently, the American Association for the Surgery of Trauma (AAST) proposed an anatomic severity grading system. The classification has been recently validated in acute appendicitis and the AAST emergency general surgery grade determined by preoperative imaging strongly correlated to operative findings. We aim to study the correlation between preoperative appendicitis grade and operative findings in our center's geriatric population operated for acute appendicitis.

Methods: Medical records of patients over the age of 65 years diagnosed with acute appendicitis who underwent appendectomy between 2019 and 2023 were selected. Sixty-one patients were included. Computed tomography findings were classified according to the image AAST description of organ and surgical findings were also divided according to the operative AAST description of appendicitis. Data were analyzed and correlated using SPSS.

Results: All of our patients underwent imaging examinations before undergoing surgery, and all of them had computed tomography. In our population, two patients had perforated appendix with an abscess and one patient had peritonitis while computed tomography showed a normal appendix. The estimated perforation rate was 67.21%, imaging examination showed normal appendix in 7.32% of cases, grade 2 and 3 of I-AAST in 24.39% of cases each, an abscess (grade 4 of I-AAST) in 31,71%, peritonitis (grade 5 of I-AAST) in 12.2% of cases.

Conclusion: The AAST emergency general surgery grade determined by preoperative imaging is associated with a high accuracy in detection of perforated forms. It is important to be aware of atypical presentations to avoid misdiagnosis and complications.

OC041. INTRA-ARTICULAR INFILTRATION IN ARTHROSCOPIC KNEE SURGERY: EFFICIENCY OF DEXAMETHASONE AND MAGNESIUM SULFATE AS ADJUNCTS TO BUPIVACAINE

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Introduction: Knee arthroscopy is often associated

with moderate to severe postoperative pain. Intra-articular injection of local anesthetics is used to ensure postoperative analgesia. The objective of this study was to evaluate the efficiency of dexamethasone (Dexa) and magnesium sulfate (Mg) as adjuncts to bupivacaine (Bupi) in enhancing postoperative analgesia.

Methods: We conducted a prospective, randomized, double-blinded study involving 75 patients scheduled for knee arthroscopic surgery, aged over 18 years, classified as ASA I or II. Patients were divided into three groups : the Bupi group received 10 ml of saline with 10 ml of 5% bupivacaine , the Dexa group received 4 mg of dexamethasone (1 ml) and 9 ml of saline with bupivacaine, and the Mg group received 1.5 g of magnesium sulfate with bupivacaine. Surgery was performed under spinal anesthesia. Postoperative analgesia was managed with patient-controlled analgesia (PCA) morphine. The primary endpoint was morphine consumption the first 24 hours. Secondary endpoints included visual analog scale (VAS) within 24 hours.

Results: Cumulative morphine consumption was higher in the Bupi group compared to the Dexa and Mg groups ($p=0.001$ and $p<0.0001$, respectively). At 24 hours , static VAS scores were higher in the Bupi group compared to the Mg and Dexa groups ($p=0.004$ and $p=0.019$, respectively). Dynamic VAS scores at 24 hours were lower in the Mg group compared to the Bupi group ($p=0.005$).

Conclusion: The addition of adjuncts such as dexamethasone or magnesium sulfate to intra-articular bupivacaine improves postoperative analgesia quality and facilitates better patient rehabilitation.

OC042. FATAL FAT EMBOLISM AND LIPOSUCTION: THE DOCTOR'S RESPONSIBILITY

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Introduction: The lipoplasty, is a modern body contouring technique, which is widely adopted for aesthetic purposes, despite accompanied by risks, notably fat embolism which is a rare complication but potentially fatal. In this context, legal proceedings could be initiated and the surgeon's responsibility may be called into question. The aim of our study is to discuss the medical responsibility in the event of a fatal fat embolism following lipoplasty.

Methods: We analysed four cases of death due to fat embolism after liposuction, collected between 2016 and 2021 at the department of Forensic Medicine at Charles Nicole Hospital in Tunis.

Results: All the victims were female, aged between 28 and 36 years. They had no pathological history. They all have had liposuction combined with lipofilling. The death occurred during, or after resuscitation measures due to acute respiratory distress. Autopsies were performed in all 4 cases. It confirmed a fat embolism in the lung. The families of the deceased have lodged a complaint against

the surgeons and health facilities concerned. A collective expert appraisal was ordered for all cases.

Conclusion: Despite medical and surgical advances, the risk of death from fat embolism is always present. In addition, there has been a resurgence in the number of complaints relating to these accidents leading to an increase in the number of legal proceedings. The **Introduction** of specific legislative framework for aesthetic medicine is necessary.

OC043. RECURRENCE OF OPERATED LUMBAR DISC HERNIATIONS : A STUDY OF RISK FACTORS

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Introduction: Lumbar discectomy is the surgical procedure that ensures radicular decompression after the failure of a well-conducted conservative treatment. However, this surgical procedure carries the risk of hernia recurrence. These recurrences are influenced by certain factors. Therefore, the aim of our study was to identify the risk factors for recurrent lumbar disc herniation after surgery.

Methods: We conducted a retrospective study on patients who underwent lumbar discectomy for lumbar disc herniation at the Department of Neurosurgery of Military Hospital in Tunis between 2013 and 2021. Our study included 180 patients divided into two groups: the first group comprised 90 patients who underwent surgery for lumbar disc herniation without recurrence, and the second group included 90 patients who underwent surgery for lumbar disc herniation and were subsequently reoperated due to recurrence

Results: The prevalence of recurrences of operated lumbar disc herniation in our study was 21.4%. The risk factors identified in our work included prolonged standing occupation ($P=0.003$), belonging to the military population ($P=0.002$), the type of herniation: subligamentous ($P=0.04$), Pfirmann stage III ($P=0.012$), MODIC type I changes ($P<10^3$), partial discectomy ($P<10^3$), and the absence of postoperative rehabilitation ($P<10^3$). Among these factors, we identified independent factors correlated with a higher rate of hernia recurrence. In this study, partial discectomy ($P=0.001$; $OR=0.123$) and the absence of postoperative rehabilitation ($P=0.002$; $OR=56.5$) were independent risk factors for the recurrence of operated lumbar disc herniation.

Conclusion: This in-depth study has enabled the establishment of recommendations regarding surgery for lumbar disc herniations, as well as the determination of specific criteria for surgical indications and techniques, with the aim of preventing recurrences.

OC044. MANAGEMENT OF PARALYTIC SCIATICA DUE TO LUMBAR DISC HERNIATION

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Introduction: Lumbar disc herniation is a frequent pathology, it is due in the majority of cases to a radicular compression by the lumbar disc herniation. It is a rare condition that can lead to high rates of morbidity among patients. The aim of our study is to describe the clinical, therapeutic characteristics of this pathology and to identify the factors of good postoperative evolution.

Methods: We conducted a retrospective study of 138 cases of paralytic sciatica operated on in the neurosurgery department of the Military Hospital of Tunis from January 2010 to December 2019.

Results: The mean age at diagnosis was 45 years, the most affected age group was 41-50 years with a male predominance. The military population represented 63% of the cases, and in all cases 85.5% of the patients. The most frequent sciatica was L5, followed by S1. A severe motor deficit (MRC \leq 3) was noted in 85.5% of cases. Motor deficit without sciatica was present in 15.2% of cases. 78.3% of the patients were operated on within 48 hours of admission. The surgery was performed on average nine days after the onset of the deficit, the onset of the motor deficit before 48 hours of the beginning of sciatica, a motor deficit without sciatica, surgery within 72 hours of the installation of the deficit, immediate postoperative improvement to a MRC \geq 4, and MRC \geq 3 preoperatively are factors statistically related to an optimal evolution one year after surgery.

Conclusion: Paralytic sciatica is a rare clinical entity, which can be a source of significant morbidity. The surgical approach by radicular decompression is the gold standard.

OC045. NORMAL PRESSURE HYDROCEPHALUS: PROGNOSTIC ELEMENTS OF SURGICAL MANAGEMENT

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Introduction: Normal pressure hydrocephalus (NPH) is a rare cerebral pathology mainly affecting elderly individuals. Neurosurgical intervention is the gold standard. However, limited data regarding prognostic factors for successful surgical management are available in the literature. Our study aimed to determine prognostic elements of neurosurgical management in patients with chronic adult hydrocephalus.

Methods: This was a descriptive retrospective study conducted in the neurosurgery department of the Military Hospital of Tunis, involving 40 patients who underwent surgery for CAH. Clinical and radiological data were collected over a 16-year period from 2004 to 2020. The primary outcome measure was the occurrence of at least one recurrence episode to determine risk factors for recurrence in patients operated for NPH.

Results: The mean age of patients was 69 years. 90% of patients had at least one comorbidity, with hypertension and diabetes being predominant. The mean duration of

illness was 15 months. The Adams and Hakim triad was present in 55% of patients. Gait disturbances were the most frequent, with a frequency of 92.5%. At least one lumbar puncture was performed in 65% of patients. 13% of operated patients experienced postoperative complications. 30% of patients experienced recurrence. The duration of illness progression ($p=0.03$), number of depletive lumbar punctures ($p=0.02$), and absence of immediate postoperative complications ($p=0.024$) had a statistically significant relationship with optimal outcomes.

Conclusion: NPH is a relatively rare condition that can lead to significant morbidity affecting patients' quality of life. Ventriculoperitoneal shunting is the gold standard. Postoperative evolution and recurrence are influenced by several factors.

OC046. POSTOPERATIVE COMPLICATIONS IN SPINA BIFIDA SURGERY

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Introduction: Spina bifida (SB) is a congenital anomaly affecting the development of the nervous system and spine. Managing SB is complex, and postnatal surgery is mainly palliative. Surgical treatment has improved the prognosis of SB; however, it is not without significant complications. Various risk factors contribute to these complications. This study aimed to identify surgical complications of SB and associated risk factors.

Methods: This was a descriptive, retrospective, longitudinal study involving patients who underwent surgery for SB at the Department of Neurosurgery at the Military Hospital of Tunis over a 20-year period.

Results: We included 30 patients with an average incidence of 1.5 new cases per year. The median age at surgery was 34 days, with a sex ratio of 0.87. Sixteen patients had meningocele and 14 had myelomeningocele, predominantly in lumbar and lumbosacral regions. Four patients underwent emergency surgery for ruptured myelomeningocele. Half of the patients had a Chiari type 2 malformation. The surgical procedure included hernia reduction and anatomical closure to prevent recurrence. Sixteen patients (53%) experienced postoperative complications, primarily hydrocephalus (43%) and meningitis (29%). Meningitis was more common in infants under one month and those with lesions larger than 8 cm. Risk factors for postoperative hydrocephalus included myelomeningocele ($p=0.010$), lesion size greater than 8 cm ($p=0.009$), Chiari type 2 malformation ($p=0.017$), and preoperative hydrocephalus ($p=0.016$). For postoperative meningitis,

Conclusion: Understanding the risk factors for postoperative complications in SB can improve prognosis through early and multidisciplinary management. Keywords: Postoperative complications, Myelomeningocele, Meningocele, Spina bifida, Risk factors

OC047. SKULL VAULT TUMORS ABOUT 20 CASES

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Introduction: A wide variety of neoplasm can involve the calvarium and their imaging appearances vary according to their pathologic features. These lesions are usually asymptomatic but may manifest as a lump with or without pain. The aim of this work is to report 20 cases of skull lesion and analyze epidemiologic, clinical presentation and therapeutic aspects of this entity. We illustrate the value of cross-sectional imaging techniques in evaluating these lesions.

Methods: we retrospectively reviewed 20 cases of skull vault lesion treated in the Neurosurgery department of military hospital Tunis during 15 years

Results: The median age was 47.4 years old The ratio of men to women was 1.2. Most patients presented initially with local swelling (in 45%) accompanied by local pain. skull lesion was found incidentally in three cases. Benign lesions are dominant (55%) with 4 cases of osteoma, 2 cases of hemangioma, 2 cases of histiocytosis X, 1 case of infra osseous meningioma, 1 cases of neurofibroma and 1 cases of epidermoid cysts. The primary malignant tumors are reported by two cases: osteosarcoma and chondrosarcoma. Total tumor resection was performed in 16/20 Histologic examination was performed to the all operated patients Adjuvant therapy was received by 9/20 patients. The later outcome was good for 55%

Conclusion: Lesions of skull vault are very diverse. They require neurosurgical intervention to confirm the diagnosis. It is crucial that primary care physicians also trained radiologist should be able to recognize these lesions and promptly address them to the closer neurosurgical center to establish the therapeutic protocol.

OC048. EXTERNAL VALIDATION OF A PROGNOSTIC MODEL IN RUPTURED ABDOMINAL AORTIC ANEURYSM REPAIR

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Introduction: Ruptured abdominal aortic aneurysms (rAAA) carry a dismal prognosis, mainly in a tunisian context where accessibility to a tertiary vascular center is both strenuous and onerous. The decision to mobilize hospital resources is very difficult in daily practice hence the need for reliable predictive score systems that use preoperative data. The aim of this study is to validate the Dutch Aneurysm Score (DAS) in a tunisian population.

Methods: A retrospective review of all patients undergoing repair for rAAA in the cardiovascular surgery department at La Rabta University Hospital between January 2019 and December 2023 was performed. The

Dutch Aneurysm Score is a prediction model that was developed to estimate the risk of death with variables available prior to surgery: age, lowest in-hospital systolic blood pressure, cardiopulmonary resuscitation, and serum hemoglobin level. Observed mortality was then compared to DAS estimated mortality using receiver operating characteristics (ROC) analysis.

Results: 25 patients met the inclusion criteria. The present study included one female and most patients (88%) were transferred from other centers(22/25). All cause observed 30-day mortality rate was 40%(10/25). The death rate in high-risk patients with a predicted death rate 50% was 63% using the DAS. The predictive performance of the DAS was analyzed using area under the curve (AUC). The DAS had an AUC of 0,77. The calibration plot was close to 1(1,17).

Conclusion: Although a small cohort, the DAS was validated in this tunisian population with local hospital resources.

OC049. 30 DAY MORTALITY RATE AFTER RUPTURED ABDOMINAL AORTIC ANEURYSM REPAIR: IS THE HARBORVIEW RISK SCORE ADAPTED TO OUR CONTEXT?

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Introduction: Ruptured abdominal aortic aneurysms (rAAA) continue to pose a significant burden. The Harborview risk score (HRS) is used to predict 30-day mortality after rAAA repair. We aimed to validate the HRS within our own data.

Methods: A retrospective review of all patients who underwent repair for rAAA in our departement between January 2019 and December 2023 was performed. The HRS assigns one point for each of the following: age greater than 76, creatinine over 2 mg/dL, a pH of less than 7.2, and any episode of hypotension. The original publication of this risk score found a 30-day mortality of 22% if patients had 1 point, 69% for 2 points, 78% for 3, and 100% mortality if all four factors were present. The HRS was calculated for all patients who were then divided into five groups (0-4). Observed mortality was compared to HRS estimated mortality using receiver operating characteristics (ROC) analysis.

Results: During the five-year study, 25 patients met the inclusion criteria. The majority of patients (88%) were transferred from other centers (22/25). All patients underwent conventional open surgery. Observed 30-day mortality was null for a score of 0 points(0/7), 28,57%(2/9) for 1 point, 33,33% (1/3) for 2 points, 100% (5/5) for 3 points, and 100% (1/1)for 4 points. ROC analysis revealed no significant difference in the area under the curve(AUC) for HRS estimated (AUC: 0.77) and HRS observed(AUC: 0.73)mortality.

Conclusion: The HRS was validated in our department. It's a reliable tool in a real-world setting offering prognosis information.

OC051. PERCUTANEOUS TRANSLUMINAL ANGIOPLASTY FOR AVF STENOSIS: A SINGLE CENTER PROSPECTIVE STUDY

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Introduction: Percutaneous transluminal angioplasty (PTA) has revolutionized the management of arteriovenous fistula (AVF) stenosis. However, this remains contentious due to drawbacks such as cost and the need for repeated interventions. This study aims to present the outcomes of de novo PTA for AVF stenosis at one single tertiary referral vascular surgery center and to identify factors predictive of reintervention.

Methods: This was a prospective, monocentric and descriptive study including patients diagnosed with denovo AVF stenosis and treated by PTA. Clinical, angiographic and procedure-related factors were included in the analysis. Primary end-points were technical and clinical success, as well as primary and secondary patency. Secondary outcomes were predictive factors of restenosis.

Results: The study population consisted of 44 patients and a total of 53 stenosis treated. The mean age was 57 years with a slight female predominance (59%). The native/prosthetic AVF ratio was 5.3. The most frequent type of vascular access was brachio-cephalic fistula (50%). The reintervention rate was 39%. Post-intervention primary patency rates at 1 month, 3 months, 6 months and 12 months were 84%, 77%, 70% and 52%, respectively. The median primary patency time was 8.9 months. Post-intervention secondary patency rates at 1 month, 3 months, 6 months and 12 months were 95%, 89%, 82% and 75%, respectively. In statistical analyses obesity was the only significant predictor factor of post-intervention primary patency loss ($p=0.05$), with a median primary patency of 4.8 months and 9.6 months for patients with Body Mass Index ≥ 30 and <30 respectively.

Conclusion: Percutaneous transluminal angioplasty for arteriovenous fistula stenosis proves to be a secure and dependable method.

OC052. HYBRID PROCEDURES AS A NOVEL TECHNIQUE IN THE TREATMENT OF LOWER LIMB OCCLUSIVE DISEASE

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Introduction: Lower extremity arterial disease is a serious condition due to its local and general prognosis. Currently, hybrid treatment is increasingly recommended for managing ilio-femoral occlusive lesions. The objective of our study was to report the outcomes of hybrid surgery for iliac-femoral occlusive lesions in terms of primary

and secondary patency, limb salvage, and postoperative complications.

Methods: Our study was a descriptive retrospective analysis conducted in the Peripheral Vascular Surgery and Organ Transplantation Department of the Military Hospital of Tunis. We included patients who underwent hybrid surgery for lower limb arterial occlusive disease between January 2009 and December 2021. We analyzed early and late morbidity and mortality, patency rates, and limb salvage rates.

Results: Our study population consisted of 36 patients with a mean age of 63 years, of whom 64% were diabetic, 58% had dyslipidemia, 56% were smokers and 53% had hypertension. Early morbidity and mortality rates were 19% and 2.8%, respectively. Late morbidity and mortality rates were 33% and 5.6%, respectively. Graft thrombosis was the most common early and late morbidity (6% and 19%, respectively). The 1-year, 3-year, and 5-year primary patency rates were 79%, 73%, and 62%, respectively. Secondary patency rates at one, three, and five years were 87.5%, 82%, and 76.1%, respectively. Limb salvage rates at one, three, and five years were 95%, 91%, and 90%, respectively.

Conclusion: Our **Results** suggest that the hybrid approach offers an excellent alternative given the relatively low morbidity and mortality rates and the satisfactory long-term permeability and limb salvage rates.

OC053. NON-MUSCLE INVASIVE BLADDER CANCERS: FACTORS OF RECURRENCE AND PROGRESSION

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Introduction: Bladder cancer is the first urological cancer in Tunisia. Non-muscle invasive bladder cancers (NMIBC) are characterized by a potential of recurrence and progression, particularly towards the infiltration of the bladder muscle. Our objective was to study the factors of recurrence and progression of NMIBC

Methods: This was a retrospective study conducted at the urology department of La Rabta Hospital in Tunis including patients operated for the first time for a NMIBC between January 2010 and December 2011.

Results: The average age of the 274 patients included was 65.1 years with a Sex Ratio of 9.1. 79.2% of the population were smokers. 93.1% of patients presented with gross hematuria. The diagnosis of bladder tumor was made on urinary ultrasound in 249 patients. 98 patients recurred during the follow-up, 30 patients progressed 24 of them progressed to the infiltration of the bladder muscle. On multivariate study, consultation delay over 1 month from the first symptoms onset ($p=0.021$; OR=2.22), NLR $\geq 3,68$ ($p<0.001$; OR=4.55) and the absence of treatment by the BCG ($p<0.001$; OR=3.87) were independent significant factors for recurrence. The independent factors of progression were the consultation delay over 1 month from the onset of symptoms ($p=0.019$; OR=5.72), bladder

papillomatosis ($p=0.041$; $OR=11.85$), the pT1 stage ($p=0.043$; $OR=0.126$), the high tumor grade ($p=0.042$; $OR=7.462$) and the presence of carcinoma in situ ($p=0.016$; $OR=35.731$).

Conclusion: Consultation delay, $NLR \geq 3.68$, absence of BCG, bladder papillomatosis and the histological characteristics of NMIBC were the independent factors of recurrence and progression.

OC054. PREVALENCE OF FECAL CARRIAGE OF FLUOROQUINOLONE-RESISTANT BACTERIA IN PATIENTS UNDERGOING INITIAL TRANSRECTAL PROSTATE BIOPSY

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Introduction: Transrectal prostate biopsy is one of the most common procedures in urology. Although it is considered safe, infectious complications are frequently observed in practice. Recently, the rate of post-biopsy infectious complications has increased. The aim of our study was to determine the prevalence of rectal carriage of fluoroquinolone-resistant bacteria in patients undergoing a transrectal prostate biopsy.

Methods: This is a retrospective, descriptive, and analytical study of patients suspected of having prostate cancer, undergoing an initial transrectal ultrasound-guided prostate biopsy in our department between January 2019 and December 2020.

Results: A total of 47 out of 120 patients (39.16%) had fluoroquinolone-resistant bacteria in rectal cultures. The most dominant isolates were *Escherichia coli* (95.7%). The antibiotic susceptibility profiles of rectal isolates showed high levels of resistance to ampicillin (91.4%) and trimethoprim-sulfamethoxazole (85.1%), while resistance to amikacin, piperacillin-tazobactam, fosfomycin, and imipenem remained very low. Multivariate analysis showed that previous use of fluoroquinolones ($OR, 3.38$; 95% CI, 1.62-8.84; $P = 0.001$) and history of hospitalization ($OR, 4.91$; 95% CI, 1.54-11.72; $P = 0.003$) were significant risk factors for the carriage of fluoroquinolone-resistant bacteria. However, statistical analysis revealed no significant difference between the group of patients with fluoroquinolone-resistant rectal flora and the group with fluoroquinolone-sensitive rectal flora in terms of rates of infectious and non-infectious complications.

Conclusion: Our study showed a worrying increase in the rate of fluoroquinolone-resistant bacteria in the rectal flora of patients undergoing a transrectal prostate biopsy. Therefore, it seems imperative to minimize the prescription of fluoroquinolones before a prostate biopsy.

OC055. RISK FACTORS FOR INFECTIOUS COMPLICATIONS AFTER TRANSRECTAL PROSTATE BIOPSY: A RETROSPECTIVE COHORT STUDY

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Introduction: Transrectal prostate biopsy is the gold standard for the definitive diagnosis of prostate cancer. This procedure is associated with several complications. Our aim was to determine risk factors for infectious complications after prostate biopsy.

Methods: This is a retrospective, descriptive, and analytical study of patients suspected of having prostate cancer, undergoing a transrectal ultrasound-guided prostate biopsy in our department between January 2020 and December 2022.

Results: 152 patients who met the inclusion criteria were selected for this study. The patients were divided into two groups based on infectious complications: the group with an infectious complication (11 patients) and the group without a septic complication (141 patients). In the statistical analysis, no significant difference was found between the two groups in terms of age, average PSA level at diagnosis, BMI, median prostate volume, post-void residual volume, percentage of patients with cancer identified during the biopsy, percentage of patients with a history of cancer, and percentage of patients with a history of biopsy, hypertension, and use of immunosuppressive drugs. However, there were significant differences between the two groups in terms of a history of diabetes, urinary tract infection, hospitalization, and prior use of quinolones. Multivariate logistic regression analysis showed that a history of hospitalization and quinolone use were risk factors for infectious complications after prostate biopsy.

Conclusion: According to our study, a history of hospitalization and prior use of quinolones increase the risk of infection after a transrectal prostate biopsy.

OC056. KI67 AND MCM6 PROLIFERATION MARKERS EXPRESSION IN BLADDER UROTHELIAL TUMORS

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Introduction: The prognosis of bladder tumors (BT) remains unpredictable in some cases despite the determination of grade and stage. Recent studies have highlighted the value of Ki67 in assessing the evolutionary potential of BT. The aim of our study was to evaluate the expression of Ki67 and MCM6 in comparison to predictive parameters of biological aggressiveness, and to assess their impact on bladder tumors.

Methods: We conducted a retrospective study involving 74 cases of BT from endoscopic resections and radical cystoprostatectomies performed between 2011 and 2013. Immunostaining of Ki67 and MCM6 in tumors was assessed based on the labeling rate of each antibody. This expression was correlated with endoscopic, pathological, and evolutionary parameters.

Results: Our Results showed that immunohistochemical expression of Ki67 was statistically correlated with

tumor grade, stage, and size. In contrast, no statistically significant correlation was found between MCM6 levels and these parameters.

Conclusion: Our study is the first to evaluate MCM6 in bladder urothelial carcinomas. In this preliminary study, the lack of correlation between MCM6 and various clinico-endoscopic and pathological parameters suggests that MCM6 may not be a predictive marker for assessing the prognosis of these tumors.

OC057. PERCUTANEOUS NEPHROLITHOTOMY IN PATIENTS WITH RENAL MALFORMATIONS

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Introduction: Kidney stones in patients with malformative uropathy, such as horseshoe kidney and kidney with rotation anomalies are common. Despite anatomical challenges, endo-urology techniques, including percutaneous nephrolithotomy (PCNL), have revolutionized stone management. In this study we evaluate the **Results** of PCNL in patients with malformative renal uropathy.

Methods: We conducted a retrospective study on patients with renal malformations who underwent PCNL from January 2015 to January 2024 at our Department. Preoperative and postoperative data, including demographics, stone location and size, type of malformative uropathy, and stone-free rate (SFR), were assessed. Procedures primarily used a single-path approach and the Galdakao-modified Valdivia position. SFR was defined as the absence of residual stone fragments >3 mm at 1 month on an abdominal CT scan.

Results: Fifteen patients were included, with a mean age of 56.7±15.64 years and 85.3% were males. The BMI was 29.5 kg/m². Malformations included kidneys with rotations anomalies (14.3%), horseshoe kidneys (28.6%), and kidney with bifid renal pelvis (57.1%). The mean stone size was 32.5±7.7 mm, with a mean density of 967±360. The stone-free rate after PCNL was 66.7%. All patients underwent nephrostomy drainage with postoperative ureteral stent insertion. Residual fragments in five patients were treated with shockwave lithotripsy in two cases and flexible ureteroscopy the other three cases.

Conclusion: PCNL is an effective procedure for treating kidney stones in patients with anatomical anomalies.

OC058. RESULTS OF PERCUTANEOUS NEPHROLITHOTOMY IN THE TREATMENT OF KIDNEY STONES IN PATIENTS WITH A SINGLE KIDNEY

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Introduction: Percutaneous nephrolithotomy PCNL is

the preferred method for treating large, staghorn kidney stones. However, there is limited research on its outcomes in patients with a single functional or anatomical kidney. This study aims to evaluate the efficacy and safety of PCNL in treating renal stones in patients with a single kidney.

Methods: A retrospective study was conducted on patients with a single kidney who underwent PCNL between January 2015 and January 2024 at our center. Data collected included demographics, stone characteristics, bleeding and transfusion rates, operative time, complications, hospital stay, stone-free rate (SFR), and renal function (pre- and postoperative creatinine levels). Procedures were mainly performed using a single-path approach and the Galdakao-modified Valdivia position. SFR was defined as the absence of residual stone fragments > 3 mm in diameter at one month, assessed via an abdominal CT scan.

Results: The study included 25 patients, with a mean age of 45.38 years and BMI of 30.1 kg/m². Seventeen patients (68%) were men. The SFR was 73%. The mean size and density of stones were 29.37±15.4 mm and 1056±450HU respectively. The mean operating time was 150.5±54 minutes. The mean difference between baseline and postoperative hemoglobin levels was 1.77±1.07g/dl. The length of hospital stay ranged from 2 to 7 days, with a median of 3 days. Initial and postoperative creatinine levels were 143±48.7mmol/L and 107.67±30 mmol/L, respectively. Postoperative complications occurred in eight patients (32%), mostly not requiring additional interventions.

Conclusion: PCNL is an effective and safe method of treating stones in patients with a single kidney.

OC059. ESTIMATION OF RESIDUAL URETERAL CALCULI RISK POST-URETEROSCOPY: INCORPORATING STONE AND T.O.HO. SCORES

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Introduction: Ureteroscopy is the gold standard for treating ureteral calculi, but residual stones post-intervention remain a significant challenge. This study aimed to identify factors predicting residual calculi after ureteroscopy.

Methods: We conducted an observational study from January 2015 to December 2019, including patients with proximal or distal ureteral calculi diagnosed via low-dose abdominal-pelvic CT scans. Surgical intervention was for symptomatic calculi or those persistent after medical treatment and lifestyle changes. We included patients treated with semi-rigid ureteroscopy using pneumatic fragmentation, excluding those treated with laser ureteroscopy. Follow-up imaging within 4 weeks post-ureteroscopy defined residual calculi as those ≥ 5 mm in diameter.

Results: The study included 415 patients, with 34% having residual ureteral calculi. Calculi locations were lumbar (22.4%), iliac (25.3%), and pelvic (52.3%). The median

stone size was 10 mm [8-12], with an average density of 895.03 HU \pm 340. Multiple residual stones were present in 11.3% of patients. Predictive factors for residual calculi included history of homolateral ureteroscopy ($p = 0.049$; OR = 2.995; 95% CI: 1.009-8.157), proximal calculus location ($p = 0.004$; OR = 0.493; 95% CI: 0.153-0.676), Steinstrasse extent ≥ 40 mm ($p = 0.006$; OR = 0.017; 95% CI: 0.176-0.811), STONE score ≥ 11 ($p = 0.002$; OR = 1.332; 95% CI: 1.145-3.92), and T.O.HO. score ≥ 5 ($p = 0.022$; OR = 2.330; 95% CI: 1.241-8.218).

Conclusion: Predictive factors for residual ureteral lithiasis post-ureteroscopy include history of homolateral endoscopy, proximal calculus location, Steinstrasse extent ≥ 40 mm, STONE score ≥ 11 , and T.O.HO. score ≥ 5 .

OC060. SPERMATIC CORD TORSION: PREDICTIVE VALUE OF NEUTROPHIL-TO-LYMPHOCYTE RATIO FOR TESTICULAR NECROSIS

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Introduction: The intricate issue in spermatic cord torsion lies in the potential occurrence of testicular necrosis. Our study aimed to identify a biological predictor of testicular necrosis in these cases, complementing existing clinical factors.

Methods: This observational study, conducted from January 2002 to December 2018, focused on patients over 14 years who underwent surgery for confirmed spermatic cord torsion within 72 hours of testicular pain onset. Examinations, including hemostasis assessments and complete blood counts, followed our department's protocols. We excluded patients with concurrent inguinoscrotal pathologies, a history of scrotal surgery, homolateral inguinal hernia repair, testicular ectopia, or preoperative scrotal Doppler ultrasound.

Results: We included 74 patients, with a median age of 18 years (range: 14-47). The mean time from pain onset to surgery was 19 hours (range: 2-72). Univariate analysis identified predictive factors for testicular necrosis: duration of testicular pain prior to surgery, ipsilateral testicular pain preceding torsion, increased bursal volume, inflammatory appearance, palpation of a cord nodule, recent-onset reactive hydrocele, and elevated neutrophil-to-lymphocyte ratio (NLR). A threshold value of ≥ 2.96 for NLR was determined based on ROC curve analysis, showing a sensitivity of 0.938, specificity of 0.886, and an area under the curve of 0.886 (95% CI: 0.795-0.977). Independent predictors of testicular necrosis included a duration from pain onset to surgery ≥ 8.8 hours (OR=24.341; 95% CI: 1.84–320.9; $p=0.015$) and NLR ≥ 2.96 (OR=188.033; 95% CI: 10.82–3267.8; $p<0.001$).

Conclusion: The neutrophil-to-lymphocyte ratio ≥ 2.96 is a predictive biological factor for testicular necrosis in cases of spermatic cord torsion.

OC061. RECURRENCE OF NON-MUSCLE-INVASIVE-BLADDER CANCER: THE NEUTROPHIL-TO-LYMPHOCYTE

RATIO, A SIMPLE AND COST-EFFECTIVE BIOLOGICAL INDICATOR

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Introduction: The main concern with non-muscle-invasive bladder cancer (NMIBC) is tumor recurrence. This study aimed to determine the significance of the neutrophil-to-lymphocyte ratio (NLR) as a predictor of recurrent NMIBC.

Methods: An observational study involved patients newly diagnosed with bladder tumors from January 2010 to December 2011. Each patient was monitored for at least 10 years to assess the prognostic significance of the NLR using logistic regression analysis.

Results: Our study comprised 274 patients with an average age of 65.18 years \pm 11.96, and a male-to-female ratio of 9.1. After the initial endoscopic resection, tumors were staged as pTa in 59.1% of cases and pT1 in 40.9% of cases. Tumors were low-grade in 71.2% of cases and high-grade in 28.8% of cases. Carcinoma in situ was observed in 3.6% of cases. The 10-year survival rate of our patients was 90.4% (95% CI: 84.1 - 96.6). The tumor recurrence rate in our cohort was 35.76%. In instances of recurrence, the tumor progression rate was 30.61%. Among cases of tumor progression, the infiltration rate was 13.3%. Our study demonstrated that an NLR > 3.68 emerged as the exclusive independent predictive factor for tumor recurrence ($p < 0.001$; OR = 4.55; 95% CI: 2.079 – 9.96), regardless of the biological parameters.

Conclusion: An NLR > 3.68 emerges as an independent predictive marker for NMIBC recurrence. Our findings endorse the integration of economical biological markers, specifically NLR, into established nomograms, augmenting their predictive precision regarding tumor recurrence.

OC062. TEACHING PHYSICIAN-PATIENT RELATIONSHIP IN UROLOGY THROUGH ROLE-PLAY: EVALUATION BASED ON THE SPIKES PROTOCOL

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Introduction: This study examined the use of role-playing to teach physician-patient relationships in urology, especially for delivering bad news, and assessed the applicability of the SPIKES protocol in this context.

Methods: In this prospective study from January 17 to May 7, 2022, we collected data from second-year medical students. Active learning sessions included role-playing exercises. We evaluated the teaching of physician-patient relationships using a Likert-type scale and applied a second scale based on the SPIKES protocol, focusing on communicating adverse news.

Results: The number of participants in our study was 42. Learners rated the role-playing sessions as "good"

(median at 3 with an interquartile range Q3-Q4 of 3-4). In terms of developing motivation in the physician-patient relationship, learners rated the sessions as very good. Despite the fact that our students were unaware of the SPIKES protocol prior to the learning sessions, the evaluation was satisfactory with an average score above 14/20. There was a difference between the two groups of students who scripted a role play and those who observed the sessions with a mean score of $17/20 \pm 0.92$ for the former and a score of $14.09/20 \pm 2.77$ for the latter. This difference was significant ($p = 0.006$).

Conclusion: The evaluation of psycho-emotional teaching in urology was positive in our study. The SPIKES protocol was in line with the scenarios developed, even in areas far removed from oncology, such as surgical pathologies where organ removal was planned.

OC063. ONCOLOGICAL OUTCOMES AND SURVIVAL IN PT0/PT1/PTA TUMORS AFTER RADICAL CYSTECTOMY DUE TO UROTHELIAL CARCINOMA OF THE BLADDER

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Introduction: We assessed outcomes in patients with pT0, pT1 and pTa, in the cystectomy specimen following radical cystectomy for transitional cell carcinoma. Our objective was to identify prognostic risk factors and survival.

Methods: We reviewed retrospectively 330 patients treated with radical cystectomy for bladder urothelial carcinoma without neoadjuvant chemotherapy between October 2005 and June 2015. We selectively analyzed the clinical records of post-cystectomy pT0/pT1/pTa patients. The Kaplan-Meier method was used to evaluate survival and the log-rank test to assess differences between groups. Statistical significance was set at $p < 0.05$.

Results: We included 49 cases. The median age was 60 years. The specimen was staged at T2 in 57% of patients after transurethral resection. After cystectomy, the specimen was staged as pT0 in 38.8% and pT1/Ta in 61.2%. Median follow-up was 53 months. Lymph node metastasis were detected in 6.1% of patients (pN+) and had a negative impact on survival ($p = 0.02$). Overall survival was 89.8%, and cancer-specific survival was 83.3%. Eight patients (16.36%) developed tumor progression. An increased delay between the last bladder tumor resection and cystectomy, and T2 stages at endoscopy were the factors found to be associated with reduced disease-free survival ($p = 0.01$), disease-specific survival ($p = 0.003$) and overall survival ($p = 0.001$).

Conclusion: Although the prognosis of stage pT0/pT1/pTa carcinoma in the cystectomy specimen is excellent, some patients experience progression. The increased delay between the last bladder tumor resection and T2 initially staged cystectomy were independent predictors of poor prognosis in our study.

OC064. PROGNOSTIC IMPACT OF THE MODIFIED FRAILTY INDEX AFTER RADICAL SURGERY FOR UPPER TRACT UROTHELIAL CARCINOMA

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Introduction: The modified five-factor frailty index (mFI-5) is a recently used tool to predict postoperative outcomes. The objective of this study was to evaluate the impact of mFI-5 on the oncological prognosis of patients treated with a radical nephroureterectomy (RNU) for non-metastatic upper tract urothelial carcinoma (UTUC).

Methods: This is a retrospective study collecting all patients managed for non-metastatic UTUC who underwent RNU between 2015 and 2023. The mFI-5 was calculated based on the presence of the following five comorbidities: congestive heart failure within 30 days before surgery, diabetes mellitus, chronic obstructive pulmonary disease, partially or totally dependent functional health status at the time of surgery, and hypertension requiring antihypertensive treatment. Patients were classified into two groups according to this index : G1: Low (≤ 1 factor); G2: High (≥ 2 factors).

Results: Among the 82 patients included, 50 patients were classified in group 1 and 32 patients in group 2. There was no significant difference between the two groups concerning the length of hospital stay ($p = 0.15$), the occurrence of postoperative complications ($p = 0.07$), or histological data ($p = 0.6$). Overall survival was significantly lower in group 2 patients (85% vs 62% ; $p = 0.001$). However, there was no significant difference in progression-free survival rates between the two groups (82% vs 76% ; $p = 0.2$). Multivariate analysis showed that mFI-5 was independently associated with poorer overall survival ($p < 0.001$) but not with poorer progression-free survival ($p = 0.8$).

Conclusion: The mFI-5 proved to be a significant predictive indicator of prognosis in patients with non-metastatic UTUC treated with RNU.

OC065. CLINICAL AND THERAPEUTIC ASPECTS OF ACUTE PYELONEPHRITIS IN PREGNANCY

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Introduction: Acute pyelonephritis in pregnancy is not common. Serious maternal and fetal complications are possible. The aim is to discuss clinical and therapeutic aspects. Explain the main maternal and fetal complications.

Methods: Longitudinal descriptive retrospective study, spread over 14 years, (from February 2007 to June 2021) including patients with acute pyelonephritis during pregnancy confirmed and treated in our hospital. Studied variables: demographic, clinical and therapeutic.

Results: Eighteen patients were included with a mean age

of 24.5 (19-37 years). Eleven of them were in their third trimester. All of them had a fever and half of them had lower back pain. Renal ultrasound showed ureteropyelo caliceal dilatation with lithiasis for 8 patients. All of the patients had an endo-ureteral prosthesis with an antibiotic therapy. A case of fetal death in utero at 14 SA was caused by perinephric phlegmon requiring percutaneous drainage.

Conclusion: Diagnosis of acute pyelonephritis in pregnancy: Clinical and paraclinical. Urinary ultrasound: Key examination. Early treatment: Antibiotic therapy often combined with endourological treatment.

OC066. SIGNIFICANCE OF COMPLETE BLOOD COUNT PARAMETERS IN PREDICTING INFECTIOUS COMPLICATIONS POST PERCUTANEOUS NEPHROLITHOTOMY

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Introduction: Percutaneous nephrolithotomy (PNL) is a proven technique for treating urinary stone disease. However, the safety of PNL remains a matter for consideration. The objective of this study was to assess the reliability of complete blood count (CBC) parameters as potential biomarkers for the occurrence of infectious complications post-PNL.

Methods: We conducted a retrospective study between 2017 and 2021, including all patients who underwent PNL for a kidney stone. Infectious complications were noted. Preoperative CBC parameters, including neutrophil-to-lymphocyte ratio (NLR), platelet-to-lymphocyte ratio (PLR), and the systemic immune-inflammation index (SII), were studied. The significance threshold was set at 0.05.

Results: We included 297 patients. The average age of the patients was 49.73 ± 13.19 years. Postoperative infectious complications occurred in 57 patients (19.2%). Among these complications, 26 patients (45.6%) had isolated fever, 35% had acute pyelonephritis, 9 patients (15%) had sepsis, and only 2 patients (3.5%) had septic shock. Factors correlated with the occurrence of infectious complications post-PNL were female gender ($p=0.006$), stone size ($p=0.029$), NLR ($p<0.001$), PLR ($p=0.027$), SII ($p=0.003$), operative time > 2 hours ($p=0.018$), and the presence of a residual stone ($p=0.001$). Independent factors for the occurrence of infectious complications post-PNL were: NLR ($p<0.001$), PLR ($p=0.027$), SII ($p=0.003$), presence of a residual stone ($p<0.001$), and female gender ($p=0.008$).

Conclusion: Our study highlights the importance of identifying risk factors for infectious complications post-PNL, allowing for early intervention. The preoperative CBC appears to be a reliable parameter for predicting infectious complications post-PNL.

OC067. COUGH ASSESSMENT IN PATIENTS TREATED FOR SARCOIDOSIS

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Introduction: Background: Chronic cough may be the unique complaint of patients treated for sarcoidosis with thoracic involvement. It may impair their quality of life.

Aim: Assess cough in patients treated for sarcoidosis with thoracic involvement.

Methods: Cross-sectional study focusing on patients treated for sarcoidosis with thoracic involvement in the pulmonology department of Mongi Slim La Marsa University Hospital (from 2018 to 2022). Cough was assessed by the Leicester Cough Questionnaire (LCQ) during telephone control. This questionnaire is composed of 3 domains: physical, psychological, and social. The total LCQ score was between 3 and 21 (3 was the worst score and 21 was the best).

Results: Forty-six patients (mean age=53 years, gender-ratio=0.58) were contacted. Diagnosis of sarcoidosis was confirmed histologically in 22 cases. Thoracic localization was classified: stage 1 (17%), stage 2 (61%), stage 3 (5%), and stage 4 (17%). Extra thoracic localizations were identified in 28 cases. In terms of respiratory function, the mean FEV1 was 2.03 l (74%) and the FVC was 2.5 l (74%). The mean score of LCQ was 15.87 (3.57-21): physical domain 5.14 (1.37-7), psychological domain 5.15 (1.2-7), social domain 5.58 (1-7). LCQ score was inversely associated with the radiological classification of sarcoidosis (total score ($p=0.025$), physical domain ($p=0.062$), psychological domain ($p=0.016$), social domain ($p=0.021$)): Stage 1 with the highest scores and Stage 4 with the lowest scores.

Conclusion: The LCQ is a straightforward instrument for evaluating quality of life related to cough, and it is particularly advantageous for assessing the impact of treatment on cough.

OC068. SLEEP APNEA SYNDROME CHARACTERISTICS ACCORDING TO HEART FAILURE PHENOTYPE

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Introduction: The prevalence and characteristics of sleep apnea syndrome (SAS) have been well-studied in heart failure, especially in heart failure with reduced ejection fraction (HFrEF). Our study aimed to investigate and compare the prevalence and characteristics of SAS in patients with HFrEF versus those with HFpEF.

Methods: A cross-sectional study was conducted in the cardiology and pulmonology departments of the FSI hospital in Marsa, from January to June 2022, including

80 patients with stable heart failure. All patients underwent ambulatory polygraphy and transthoracic echocardiography. The patients were stratified into two groups based on LVEF: Group R patients with HFReEF (n=55), and Group P Patients with HFpEF (n=25).

Results: Patients with HFpEF were significantly older (66.7±9.9 vs. 60.4±8.6 years, p=0.004). There was no significant difference for anthropometric data. For SAS symptoms, restless sleep was more frequent in HFpEF (64% vs. 37%, p=0.02). SAS was diagnosed in 83% of patients, with 59% of obstructive sleep apnea (OSA) and 24% of central sleep apnea (CSA). No significant difference in SAS prevalence was found between the two groups (76% in HFpEF and 85% in HFReEF, p=0.36). CSA was more frequent in the R group (31% versus 8%, p=0.008) and OSA was more frequent in the P group (68% versus 54%, p=0.036).

Conclusion: SAS is common in both HFReEF and HFpEF, and it was mainly obstructive in HFpEF and central in HFReEF which may reflect the severity of HF.

OC069. EXTRAPULMONARY TUBERCULOSIS AMONG TUNISIAN INTERIOR SECURITY FORCES

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Introduction: Tuberculosis remains a public health issue in Tunisia. According to the National Tuberculosis Control Program (PNLT) published in 2018, extrapulmonary tuberculosis (EPTB) accounts for 62% of TB cases. This study aims to examine the epidemiological characteristics of EPTB.

Methods: This is a retrospective study compiling the records of 104 patients followed for tuberculosis, of all forms, over ten years from January 2014 to January 2024 at the Interior Security Forces Hospital in La Marsa.

Results: EPTB was present in 61 of 104 patients (58.7%), including 28 men (45.2%) and 33 women (54.8%). The mean age was 39.9 years (range 10-73 years). The most common sites of EPTB were lymph nodes (54.1%; n=33), predominantly in females (21 women and 12 men), with cervical (n=28), mediastinal (n=2), and other locations (inguinal, axillary, mesenteric) each having 1 case. Other sites included pleura (18%; 6 men and 6 women), peritoneum (16.4%; 6 women and 4 men), and urogenital tract (9.8%; 5 men and 1 woman). Additional locations included colonic (3.3%; 1 man and 1 woman), spondylodiscitis, hepatic, and cerebral (1.6% each, all women). Disseminated tuberculosis occurred in 3.3% of cases, and pulmonary involvement was associated in 4.9%. Compared to the isolated pulmonary tuberculosis group, women predominated in the EPTB group (78.6% vs. 45.2%; p<0.001).

Conclusion: This retrospective cohort study revealed a high incidence of EPTB with a notable predominance in women.

OC071. CLINICAL FRAILTY SCALE IN INTERSTITIAL LUNG DISEASE PATIENTS: A PROGNOSTIC MARKER?

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Introduction: Clinical Frailty Scale (CFS) is a useful tool to summarize and roughly quantify the level of fitness or frailty and overall health status in elderly. Vulnerability in interstitial lung disease (ILD) patients is multidimensional with multiple related-factors. This study aimed to determine the value of CFS to measure frailty in ILD patients.

Methods: A cross-sectional study was conducted at the pneumology department D of Abderrahmane Mami Hospital, including 93 patients diagnosed with ILD between 2021 and 2023. The CFS was assessed and correlated to frailty predictors in ILD.

Results: The mean age was 67±11 years. The sex ratio was 0.27. The median CFS was 5±1.6. Idiopathic pulmonary fibrosis (IPF) was noted in 41% of patients. The mean CFS in IPF patients was 5.1 versus 5.4 in non IPF patients (p=0.478). CFS was correlated with dyspnea (r=0.374; p<0.001), and negatively correlated with arterial oxygen pressure (r=-0.281; p=0.009), arterial oxygen saturation (r=-0.287; p=0.008), forced expiratory volume in the first second (r=-0.341; p=0.021), forced vital capacity (r=-0.4; p=0.006), total lung capacity (r=-0.404; p=0.027). CFS was not statistically correlated with age, gender, diffusing capacity of carbon monoxide or 6-minute walk test.

Conclusion: CFS is correlated with dyspnea, desaturation parameters and overall functional indicators, thus proving to be a useful way to predict frailty in ILD patients. Integrating CFS into clinical decision-making seems to be a promising suggestion.

OC072. FUNCTIONAL COMORBIDITY INDEX AND OBSTRUCTIVE SLEEP APNEA: WHAT ASSOCIATION?

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Introduction: Obstructive sleep apnea (OSA) is commonly associated with multiple chronic comorbid conditions that can impact physical functional status. The functional comorbidity index (FCI) includes common comorbidities and function regardless of mortality risk. The aim of the study was to determine the predictability of the FCI in evaluating the impact of common comorbidities on OSA severity.

Methods: A retrospective study was conducted at the pneumology department D of Abderrahmane Mami Hospital, including 825 patients diagnosed with OSA between 2014 and 2023 by ventilatory polygraphy.

The FCI was assessed and correlated to clinical and polygraphic features.

Results: The mean age was 57±12 years. The sex ratio was 0.4. Overweight was found in 87% of patients. The median FCI was 2±0.9. A statistically significant correlation was found between FCI and age ($r=0.231$; $p=0.0001$), Pichot score ($r=0.205$; $p=0.0001$), Stop Bang score ($r=0.202$; $p=0.0001$), body mass index ($r=0.154$; $p=0.0001$), waist circumference ($r=0.960$; $p=0.049$), anemia ($r=-0.133$; $p=0.0001$), glycemia ($r=0.3$; $p=0.0001$), arterial oxygen pressure ($r=-0.910$; $p=0.02$), apnea hypopnea index ($r=0.082$; $p=0.019$), desaturation index ($r=0.125$; $p=0.0001$), minimal nocturnal pulse oxygen saturation ($r=-0.084$; $p=0.018$) and the nocturnal pulse oxygen saturation below 90% in percentage ($r=0.129$; $p=0.0001$). The FCI was not statistically correlated to the Epworth score ($r=0.059$; $p=0.096$), the mean apnea or hypopnea duration (respectively $r=0.008$; $p=0.837$ and $r=-0.075$; $p=0.060$) and mean nocturnal oxygen saturation ($r=-0.022$; $p=0.060$).

Conclusion: According to our study, the FCI is a promising tool to predict OSA severity. It is correlated with obesity indicators, metabolic disorders, OSA severity indicator and desaturation parameters.

OC073. GENERAL CONDITION DETERIORATION IN PULMONARY TUBERCULOSIS: WHAT IMPACT?

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Introduction: Altered general condition (AGC) is a frequent sign associated with tuberculosis. Our aim was to study the impact of AGC on the course of pulmonary tuberculosis.

Methods: A retrospective and comparative study carried out in the Pneumology Department of Charles Nicolle Hospital in Tunis, including 141 patients hospitalized for confirmed pulmonary tuberculosis between 2013 and 2022. Patients' general condition was assessed on the initial examination using the Performance Status Index (PS). Patients were divided into 2 groups: G1 (117 patients with a PS of 0 or 1) and G2 (24 patients with a PS ≥ 2).

Results: G1 patients were older than G2 (50.5 years±20.7 vs 43 years ± 16.4; $p=0.048$). There was no significant difference in terms of gender ($p=0.67$), smoking, ethylism and socioeconomic conditions. However, incarcerated patients had a poorer general condition (4.2% vs. 17.9%; $p=0.046$). Diabetes (40% vs 14.2%; $p=0.01$), renal failure (18.2% vs 0%; $p<0.001$) and viral hepatitis (4.8% vs 0%; $p=0.047$) were more common in G1. Nocturnal sweating was more frequently reported by G1 patients (87.5% vs. 59%; $p=0.008$). Radiological lesions were comparable between the two groups. All patients had received anti-tuberculosis treatment with similar adherence. Evolution, assessed by clinical improvement delay (PS and weight gain) and bacilloscopy negativation, was similar in both groups.

Conclusion: General condition deterioration was more

found in elderly patients with comorbidities and with no effect on the disease's course.

OC075. ANXIETY AND DEPRESSION IN POST COVID-19 SYNDROME: EXPERIENCE OF A HOSPITAL IN SOUTHERN TUNISIA

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Introduction: People who suffer from post-COVID syndrome often report impacts on their mental health. Aim: Assess the prevalence and the factors of anxiety and depression in post-COVID patients.

Methods: Cross-sectional, descriptive and analytical study over a period of 15 days from September 1st, 2022 to September 15, 2022 with 63 patients. The data-gathering tool consisted of two parts; sociodemographic characteristics and the Hospital Anxiety and Depression Scale (HAD) to screen for anxiety and depressive disorders.

Results: The average age was 45.6 years, the sex ratio was 0.53. 50.8% were of rural origin, 76.2% were married, 41.3% had a university level education and 65.1% were economically active professionals, 31.7% had a leisure activity, 38.1% had a medical background. During the COVID attack, the average duration of the symptomatic phase was 10.8 days, dominated by a flu-like syndrome (71.4%), a mild form in 47%. Isolation was respected in 88.9%. The contamination of a family member occurred in 49.2% of cases and 30.2% experienced the death of a loved one from COVID. On the HAD scale, anxiety was moderate to severe in 36.5% of patients which was associated with the existence of a medical history ($p=0.03$), the severity of the COVID attack ($p=0.05$), the presence of symptoms post-COVID ($p=0.04$) and moderate to severe depression ($p=0.008$). However, depression was moderate to severe in 27% of cases which was associated with the death of a loved one from COVID ($p=0.05$) and anxiety ($p=0.008$).

Conclusion: The psychiatric disorders in post-COVID must be sought by front-line doctors even in the absence of a verbalized complaint

OC076. USE AND PERCEPTION OF THE HARMS OF ELECTRONIC CIGARETTE AMONG MEDICAL STUDENTS

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Introduction: The fight against tobacco is a public health priority. E-cigarettes are designed by the general population as an aid to smoking cessation. However, this remains a controversial issue.

Methods: There is a transversal descriptive study of interest to medical students in Tunisia. The objective of

this work is to study the practices and experiences of e-cigarette users among medical students.

Results: Our population consisted of 31 subjects. Fifteen participants (48.3%) were not regular smokers when they started vaping. Twenty-one participants (37.7%) used e-cigarettes daily. Almost half of the participants (51.6%, n=16) increased the frequency of vaping over time. At the time of initiation of vaping, sixteen participants were normal cigarette smokers (51.6%), and twelve participants (39%) began vaping for smoking cessation. Nine of them managed to reduce their smoking after using the e-cigarette and 3 participants managed to completely stop smoking. Four students switched from vaping to smoked tobacco. Almost one-third thought that e-cigarettes are rather a means of smoking cessation and 64.5% thought that e-cigarettes are a substitute for normal tobacco. The number of cigarettes consumed per day is correlated with the daily use of the vape ($p = 0.044$) and sex is a factor associated with the transition from e-cigarette to smoked tobacco ($p = 0.026$). It was also found that belief about the use of e-cigarettes is a factor influencing the desire to stop vaping ($p=0.002$).

Conclusion: Raising awareness among medical students, future actors in the fight against tobacco, regarding the use of e-cigarettes is crucial.

OC077. PARTICULARITIES OF TUBERCULOSIS DISEASE IN PATIENTS FROM SUB-SAHARAN AFRICA

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Introduction: The wave of migration in recent years has increased the number of patients from sub-Saharan Africa treated in Tunisian hospitals for tuberculosis (TB). Aim: Determine the clinical and paraclinical features of TB disease in patients from Sub-Saharan Africa.

Methods: Retrospective study including 234 patients treated for pulmonary TB between January 2016 and July 2023, at the Pneumology Department of Mongi Slim Hospital. Patients were divided into two groups: - Group 1 (G1): 25 patients from Sub-Saharan Africa - Group 0 (G0): 209 Tunisian patients.

Results: G1 patients were younger (27 years vs 45 years ; $p<0.0001$) but the gender-ratio was comparable between the 2 groups. Active smoking was less frequent in G1 (16% vs 64% ; $p<0.0001$). On chest X-ray, elementary TB lesions were comparable between the 2 groups and on biological tests, mean CRP was higher in G1 (125mg/l vs 84mg/l ; $p=0.002$). Common lung involvement was more frequent in G1 (88% vs 70% ; $p=0.062$), as was pericardial involvement (8% vs 1% ; $p=0.058$). Diagnostic confirmation of TB was comparable between the 2 groups. MDR TB was more frequent in G1 (9% vs 0.6% ; $p=0.044$). All patients were put on anti-tuberculosis treatment, with a comparable rate of side effects. The rate of patients lost to follow-up was higher in G1 (48% vs 15% ; $p<0.0001$).

Conclusion: Sub-Saharan Africa's patients treated for TB disease are younger, mostly non-smokers, with higher CRP, more frequent pericardial involvement, more frequent MDR TB and a higher rate of loss to follow-up.

OC078. THE MICROBIOLOGICAL ASPECT OF DESCENDING NECROTIZING MEDIASTINITIS

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Introduction: Descending necrotizing mediastinitis (DNM) is a serious infective process with a high mortality. This management includes surgical drainage, resuscitation and appropriate antibiotic therapy. The study's objective was to establish a bacteriological profile of DNM in intensive care department.

Methods: Between 2002 and 2023, the records of 41 patients, managed in our department for a DMN, were reviewed

Results: The median age was 51.4 years. Among our patients, 21 were diabetics, 22 were smokers and 15 were under non-steroid anti-inflammatory drugs. The origin of the infection was dental in 20 cases. The median delay in diagnosis was of 8 days. CT scan and bacteriological samples confirmed diagnosis. Bacterial cultures were positive in 25 patients, with 11 poly-microbial samples. We isolated 38 germs, with Multidrug resistant bacteria in 6 cases. Extended-spectrum β -lactamase-producing enterobacteria were the most common (3 cases). All isolated *S. aureus* strains produced a penicillinase and 2 strains were MRSA. For *klebsiella pneumoniae* the 4 strains were sensitive to colistin and tigecycline. Half of the strains were ESBL producers and only one strain was resistant to gentamycin. All *E.coli* strains were sensitive to colimycin, tigecycline and amikacin. All 3 isolated strains of *colibacillus* were resistant to amoxicillin and piperacillin by secretion of broad-spectrum penicillinase and only one strain was labelled as MDR by ESBL production. The *acinetobacter baumannii* that we isolated from the deep-sampling was a highly colimycin-resistant bacterium. Mortality rate was 21.9%

Conclusion: Local bacteria resistance profile monitoring is important to guide probabilistic antibiotic therapy in DNM.

OC080. CLINICAL AND SPIROMETRIC CHARACTERISTICS OF ASTHMA IN OBESE PATIENTS

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Introduction: Obesity is considered an exacerbating factor for asthma and a cause of poor disease control despite treatment. The objective is to describe the

clinical characteristics of obese asthmatic patients and the influence of obesity on asthma control.

Methods: A cross-sectional study, including asthmatic patients, was conducted at the pneumology department of the FSI hospital between January and July 2024. Patients were divided into two groups: G1: obese and G2: non-obese.

Results: A total of 189 asthmatic patients were included, with 68 patients in G1 (35.9%) and 121 patients in G2. Patients in G1 were older (50.9 ± 12.5 vs. 42.6 ± 14.9 years, $p=10^{-4}$). Personal history of atopy was more common in G2, particularly allergic rhinitis (70.5% vs. 77.6%, $p=0.2$) and allergic conjunctivitis (39.7% vs. 51.2%, $p=0.1$). Positive prick tests were more prevalent in G2 (69.4% vs. 59.6%, $p=0.03$). Regarding spirometry data, the average FEV1 was higher in G2 (87% vs. 81.6%, $p=0.05$). Airflow limitation was more frequently observed in G1 (64.7% vs. 60.3%, $p=0.5$). Reversible airflow limitation was found in 17.6% of G1 and 12.3% of G2. Controlled asthma was more frequent in G2 (74.3% vs. 44.1%, $p<10^{-3}$).

Conclusion: Asthma in obese patients occurs at a later age and is more frequently of non-allergic origin. Obesity is contributing to the severity and poor control of asthma.

OC081. CHARACTERISTICS OF ASTHMA WITH NON-REVERSIBLE AIRFLOW LIMITATION

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Introduction: Airflow limitation (AL) is completely reversible in asthma. A non-reversible AL can be seen in some asthmatic patients. The objective is to describe the clinical characteristics of asthmatic patients with a non-reversible AL.

Methods: A cross-sectional study, including asthmatic patients, was conducted at the pneumology department of the FSI hospital between January and July 2024. The patients were divided into two groups: G1: patients with non-reversible AL and G2: patients without non-reversible AL.

Results: A total of 204 patients were included. Spirometry was normal in 37% of patients. The individualized ventilatory deficits were; small airway disease (30% of patients), non-reversible AL (17% of patients), and reversible AL (13% of patients). G1 patients were older (47 vs 44 years) and had a higher smoking rate (60% vs. 51%, $p=0.3$). Asthma was primarily allergic in both groups (65% vs. 63%, $p=0.7$). Mean FEV1 was lower in G1 (68% vs. 88%). Asthma control was better in G2 (45% vs. 65%, $p=0.03$). Patients with at least one exacerbation in the previous year were higher in G1 (77% vs. 53%, $p=0.01$). The prescription of a combination of high-dose inhaled corticosteroids and long-acting bronchodilators was more frequent in G1 (20% vs. 6%, $p=0.01$).

Conclusion: Non-reversible AL is associated with more severe asthma and poor asthma control.

OC082. ASSOCIATION BETWEEN OBSTRUCTIVE SLEEP APNEA SEVERITY AND INFLAMMATORY MARKERS

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Introduction: obstructive sleep apnea hypopnea syndrome (OSAS) is associated with various comorbidities, including cardiovascular diseases, metabolic disorders, and inflammation. We aimed to investigate the relationship between OSAS severity, inflammatory markers, and obesity in a cohort of patients with OSAS.

Methods: Comparative cross-sectional study carried out in the Pneumology Department at the Charles Nicolle University Hospital in Tunis. Including patients with confirmed diagnosis of OSAS by a respiratory polygraphy realized in hospital. All patients had a C-reactive protein (CRP) assay and a blood count.

Results: We included 172 patients with obstructive sleep apnea syndrome (OSAS), predominantly women (79.7%) with an average age of 59 years \pm 13 years. Most patients (62.8%) had mild to moderate OSAS, while 37.2% had severe OSAS. 82% of the patients were obese, with a mean Body Mass Index (BMI) of 36.6 ± 6.9 kg/m². The study found a statistically significant correlation between the apnea-hypopnea index (AHI), a measure of sleep apnea severity, and the C-reactive protein (CRP) level ($p=0.037$; $r=0.14$). Additionally, there was a correlation between CRP levels and BMI ($p<0.01$; $r=0.36$). However, no significant correlation was found between Neutrophil count (PNN) and AHI ($p = 0.076$) or BMI ($p = 0.4$).

Conclusion: This study suggests a significant association between OSAS severity, CRP level and BMI. These findings highlight the potential role of inflammation in the pathogenesis of OSAS, particularly in obese individuals. However, further research is needed to explore the underlying mechanisms and potential therapeutic implications of these associations.

OC083. RELATIONSHIP BETWEEN CHARLSON COMORBIDITY INDEX AND OBSTRUCTIVE SLEEP APNEA SEVERITY INDICATORS IN A TUNISIAN COHORT

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Introduction: Obstructive sleep apnea(OSA) is a cardiovascular risk factor, grafted with a high morbidity. Charlson comorbidity index(CCI) is used to measure prognostic comorbidities in chronic conditions. This study aimed to determine the association between CCI and OSA severity predictors in a Tunisian cohort.

Methods: Retrospective study was conducted at the pneumology department D of Abderrahman Mami Hospital, including 825 OSA patients diagnosed between 2014 and 2023. The CCI was assessed. The median CCI was calculated. Two groups were defined: Group1 including 485 patients with CCI greater than or equal to the median. Group2 including 340 patients with CCI below the median.

Results: The median CCI was 3 ± 1.6 . Statistical analysis showed a significant association between a CCI greater than or equal to 3 and age (63 vs 47 years; $p < 0.001$), StopBang score (5 vs 4; $p = 0.003$), diastolic blood pressure (80 vs 70 mmHg; $p = 0.023$), glycemia (7 vs 5 mmol/l; $p < 0.001$), arterial oxygen pressure (82 vs 86 mmHg; $p = 0.009$), desaturation index (32 vs 28/h; $p = 0.022$), minimal nocturnal pulse oxygen saturation (76 vs 78%; $p = 0.005$), nocturnal pulse oxygen saturation below 90% (17 vs 13%; $p = 0.02$, 62 vs 48 minutes; $p = 0.046$). No statistically significant association was noted between CCI and Epworth score ($p = 0.403$), Pichot score ($p = 0.119$), body mass index ($p = 0.346$), apnea hypopnea index ($p = 0.115$), mean duration of apnea hypopnea ($p = 0.459$) and mean nocturnal oxygen saturation ($p = 0.718$).

Conclusion: The CCI was heterogeneously associated with OSA severity predictors. Further studies are needed to find more suitable tools to fine-tune phenotyping OSA patients according to comorbidity and severity profile to provide personalized treatment.

OC084. EVALUATION OF ANXIETY-DEPRESSIVE DISORDERS IN PULMONARY TUBERCULOSIS

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Introduction: Anxiety and depressive disorders are frequently associated with tuberculosis and are often under-recognized. In Tunisia, the prevalence of anxiety and depressive disorders among patients with pulmonary tuberculosis and their impact on the disease progression are not well-studied. The aim is to evaluate anxiety and depressive disorders in patients treated for pulmonary tuberculosis and to determine the risk factors for their occurrence.

Methods: Cross-sectional study conducted at Pneumology Department, including 100 patients treated for pulmonary tuberculosis between January 2022 and June 2023. A pre-established individual questionnaire was completed, including sociodemographic, clinical, radiological, bacteriological, and therapeutic data and HAD and Saint George scores.

Results: The average age was 52.2 years \pm 8.8. Sixty-two patients had a low socioeconomic status, 36% were smokers. The mean HAD-A and HAD-D scores were 7.2 and 8.5, respectively. The prevalence of anxiety and depression was 36% and 38% respectively. Anxiety and depression coexisted in 35% of cases. The average Saint George score was 24.2%. Fifty-two patients had a good quality of life, 16% had a moderate impairment, and

4% had a severe impairment. Anxiety and depressive disorders had a significantly negative impact on treatment adherence ($p = 0.032$ and 0.029 respectively). In multiple linear regression (HAD score as the dependent variable), predictors of depression include low socioeconomic status ($p = 0.007$), lack of social and family support ($p < 0.001$), severe clinical symptoms with the presence of hemoptysis ($p = 0.02$), dyspnea ($p = 0.041$) and poor quality of life ($p = 0.046$).

Conclusion: Anxiety and depressive disorders are frequently associated with tuberculosis. Screening and managing these disorders are necessary to improve tuberculosis prognosis.

OC085. CHARACTERISTICS OF COMMUNITY-ACQUIRED PNEUMONIA ON PATHOLOGICAL LUNGS

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Introduction: Community-acquired pneumonia (CAP) is a common condition of the lower respiratory tract. The underlying lung pathology affects the prognosis and progression of this disease. This study aims to identify the epidemiological, clinical, and prognostic features of CAP in patients with pathological lungs.

Methods: This comparative retrospective study involved 127 patients hospitalized for CAP at Gabès University Hospital's Pneumology Department from 2020 to 2022. Patients were divided into two groups: Group 1 (G1) with 38 patients having chronic lung pathology and Group 2 (G2) with 89 patients having healthy lungs

Results: Chronic lung pathologies in G1 included chronic obstructive pulmonary disease (COPD) ($n = 16$), lung cancer ($n = 2$), bronchiectasis ($n = 7$), pulmonary fibrosis ($n = 8$), and sequelae of pulmonary tuberculosis ($n = 5$). CAP in G1 was more severe than in G2, with lower average ambient air saturation (89% vs. 93%, $p = 0.03$) and lower systolic blood pressure at admission (115 mmHg vs. 122 mmHg, $p = 0.048$). G1 had higher average PaCO₂ (40 mmHg vs. 31 mmHg, $p = 0.015$) and bicarbonate levels (25 mmol/L vs. 22 mmol/L, $p = 0.046$). Smoking history was more prevalent in G1 (72% vs. 42.9%, $p = 0.025$). Oxygen therapy was used more frequently in G1 (68% vs. 42.9%, $p = 0.05$) with higher flow rates (3.2 L/min vs. 1.34 L/min, $p = 0.04$). Other factors like age, gender, comorbidities, and complication rates were similar between the groups.

Conclusion: Underlying lung pathology is a factor contributing to the increased severity of community-acquired pneumonia.

OC086. THE RELATIONSHIP BETWEEN BMI AND THE SEVERITY OF COPD

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Introduction: Multiple studies have shown the existence of a clear correlation between the decrease in BMI and mortality in COPD. The aim of our study is to analyze the relationship between BMI and the severity of COPD.

Methods: A retrospective study relating to 98 files of patients with hospitalized COPD.

Results: The patients are divided into 3 groups according to their BMI: group 1: lean patients (BMI <18.5 kg/m²): 11 patients; Group 2: Patients of normal weight (BMI between 18.5 and 25 kg/m²): 53 patients and group 3: patients with overweight (BMI > 25 kg/m²): 34 patients. We have analyzed severity in COPD in the 3 groups. We have found a significantly higher rate of lean patients in the severe and very severe COPD group compared to the group of light to moderate COPD patients (11.6 % versus 5.8 %, p = 0.004). The analysis of the various severity parameters of COPD in the three groups showed a significantly higher rate of patients at the stage of respiratory insufficiency under NIV in group 1 (18.3 %) versus 11.1 % in group 2 and 16.7 % in group 3 (p = 0.05). The Bode index is higher in group 1 (p <0.001). The study of other severity parameters (number of hospitalizations, number of exacerbations, gasometric disturbances) was similar in the 3 groups. The rate of deaths due to COPD complications is higher in group 1 (p <0.001).

Conclusion: Our study showed the existence of an opposite relationship between BMI and the severity of COPD.

OC087. FACTORS INFLUENCING THE LENGTH OF HOSPITAL STAY AMONG PATIENTS WITH CHRONIC OBSTRUCTIVE PULMONARY DISEASE

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Introduction: Hospitalization in chronic obstructive pulmonary disease (COPD) patients represents an event that alters the quality of life of the patients and increases the cost of the disease. Aim: To determine the factors influencing the duration of hospitalization among COPD patients for exacerbation.

Methods: Comparative retrospective study, including 160 cases of COPD patients hospitalized in our department for COPD exacerbation between 2016 and 2022. Two groups were defined: G1 (n=76): duration of hospitalization > 7 days; G2 (n= 84): duration of hospitalization ≤ 7 days.

Results: The average hospital stay was 16.9 days (6-64 days) in G1 versus 4.1 days (2-5 days) in G2. G1 patients were younger (G1: 65 years vs. G2: 70 years; p=0.05). No differences were found for gender, comorbidities, or smoking. There was a significant statistical relationship between hypercapnia (G1: 51.1% vs G2: 52.2 %; p=0.013), respiratory acidosis (G1: 35.9% vs G2: 14.3%; p=0.001) and longer hospital stay. The use of non-invasive ventilation (NIV), which was more frequent in the G1, increased the length of hospital stay (G1: 28.2% vs G2: 19%; p = 0.03). Neither FEV1 nor the stage of COPD had a significant effect on the duration of hospitalization.

Conclusion: The duration of hospitalization appears to be longer in younger subjects, in cases of hypercapnia, respiratory acidosis, and the use of NIV. Therefore, it is crucial to recognize these factors in order to optimize care and reduce costs related to COPD.

OC088. SEVERE TUBERCULOSIS: CLINICO-RADIOLOGICAL PRESENTATION AND DISEASE COURSE

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Introduction: Tuberculosis (TB) disease is responsible for high mortality worldwide. In Tunisia, little is known about the epidemiology of severe forms of tuberculosis. This study aims to describe clinico-radiological presentation, management and course of the disease in its severe forms.

Methods: Retrospective study including 234 patients treated for TB (71 cases of severe pulmonary TB: 30% of all cases). Severe pulmonary TB was defined by the presence of one of the following criteria: Immunocompromised conditions, extensive lung involvement ,acute respiratory failure,haemoptysis of great abundance ,miliary with or without hypoxemia ,pyopneumothorax and multifocal involvement . Some patients may meet multiple severity criteria for TB.

Results: Patients included (mean age=45 years ; gender-ratio=3.17) had immunocompromised condition (n=12), extensive lung involvement (n=61), miliary form (n=9), respiratory failure (n=4), pyopneumothorax (n=3), and multifocal involvement (n=3). The average consultation time was 70 ± 79 days. On chest x-ray, abnormalities were bilateral in 77% of cases. In biology, the mean lymphocyte count was 1658 ±859 ele/mm³ (lymphopenia in 52%). The diagnosis of TB was confirmed in 82% of cases: bacteriological confirmation in 80% and histological confirmation (lymph node biopsy) in 2%. Treatment-related adverse events were observed in 25% of patients, of which 11% were severe. Death occurred in 3 patients (4%). Currently, 6 patients are being treated, 8 patients are lost to follow-up (from sub-Saharan Africa) and 54 have been declared cured.

Conclusion: Severe forms of TB are common in Tunisia (1/3 of cases) with a death rate of around 4% and drug toxicity related to anti-TB treatment observed in 1/4 of cases.

OC089. DISCHARGE AGAINST MEDICAL ADVICE ASSESSMENT OF THE KNOWLEDGE OF PUBLIC SECTOR DOCTORS

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Introduction: As consent is a fundamental right, so is refusal of care. The impact of discharge against medical advice (DAMA) is on the patient's prognosis, on the one hand, and the committed responsibility of the doctor on the other hand. The aim of this study was to evaluate the knowledge of doctors in the public sector regarding the procedures for discharge against medical advice.

Methods: We conducted a descriptive study based on a questionnaire distributed online via the Google Forms application. We included doctors working in the public sector whatever their specialty and rank.

Results: We collected 150 participants including 114 women (76%) and 36 men (24%) with a gender ratio at 0.3. Forty-one doctors (27.3%) were over 40 years old. Fifteen participants (10%) were public health doctors, 13(8.6%) were specialists, 40 (26.7%) were university hospital assistants, 24 (16%) were associates professors and 4(2.7%) professors. One hundred doctors (66.7%) stated that difficult hospitalization conditions were the main reason for DAMA. One hundred and forty-three doctors (95.3%) said they try to convince the patient of the need for care before respecting his will to DAMA. Seventy-eight doctors (52%) had adequate knowledge regarding refusal of care. The action to be taken in the event of DAMA was adequate for 69 doctors (46%). Only 39 doctors (26%) had adequate knowledge of the DAMA certificate

Conclusion: The level of knowledge of public sector doctors was average. An upgrade seems necessary in order to protect both parties, doctors and patients

OC090. ARTIFICIAL INTELLIGENCE AND SCIENTIFIC WRITING: ETHICAL AND LEGAL CONCERNS

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Introduction: Writing quality articles is essential for engaging readers and expanding reach. With technological evolution, artificial intelligence (AI) has become a valuable tool for writers. Integrating AI in scientific writing raises thoughseveral ethical concerns that must be addressed to ensure the integrity and credibility of research. In this paper, we aim to discuss these ethical challenges.

Methods: We conducted a review of the scientific literature and consulted online articles on the raised topic, while discussing the ethical and legal principles raised by this new approach.

Results: A major problem is authorship recognition and attribution. When AI tools are used, determining who gets credit for the work becomes complex, especially when authors claim complete and individual authorship without acknowledging AI contributions. Furthermore, scientists are accountable for errors or misconduct in AI-generated content. There is a lack of legislative clarity in copyright law, resulting in a legal ambiguity around intellectual ownership. To remedy this, some countries and organizations are considering specific legislative proposals for AI creations. Originality and innovation

are also important in scientific work; over-reliance on AI may lead to a decline in critical thinking and traditional research skills among scientists. Moreover, AI tools can inadvertently produce text similar to existing literature, raising plagiarism concerns.

Conclusion: Setting guidelines account for evolving technologies and the increased use of AI in scientific writing is crucial. The International Committee of Medical Journal Editors published primary guidelines in 2023, but further efforts are needed to unify recommendations and to ensure ethical and responsible use of AI tools.

OC091. SHARED MEDICAL RECORD IN THE ERA OF COMPUTERIZED MEDICAL RECORD

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Introduction: The shared medical record (SMR) use raises ethical questions which have been little studied, especially in Tunisia. The aim of our study was to describe, ethical considerations raised by the shared medical record, in particular information, confidentiality, and to identify objectives of data sharing (care, research, etc.).

Methods: A cross-sectional study (August 2023 – February 2024) including health professionals using the electronic medical record (EMR) in our hospital who gave their written informed consent. They completed a questionnaire containing several informations: general; concerning the EMR, concerning the SMR and its ethical values as well as an open question to collect suggestions.

Results: Our study included 86 participants, mainly residents (n=29) with a sex ratio of 0.43 and a mean age of 33.5 years [25-56 years]. Previous use of computer software was noted among all participants. EMR was used in common practice in 85 cases. The use of EMR facilitated the daily practice of 80 participants; the negative points noted being mainly the lack of resources, training, and computer bugs. Forty-four participants believed that the medical record was unique per hospital. Sharing health data optimized resource management, multidisciplinary and overall patient care. Ethical reservations expressed by the participants were mainly related to the values of confidentiality and respect for medical confidentiality (n=70), followed by communication/information (n=48). Sixty (69%) participants thought informed consent was necessary before sharing health data.

Conclusion: Our study showed that the participating doctors seemed aware of the ethical dilemmas raised by the SMR. Raising awareness, training health professionals, developing common standards and adding informed consent will help to generalize the SMR while respecting essential ethical values.

OC092. RESPECT OF ETHICAL GUIDELINES IN CLINICAL PRACTICE: SURVEY OF MEDICAL STUDENTS

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Introduction: Students are faced with real and sometimes different clinical scenarios that may be poorly experienced and/or perceived. The aim of our study was to take an overview of the respect of some ethical guidelines by the medical students in their clinical practice.

Methods: Cross-sectional and descriptive study. Data were collected through an anonymous, self-administered online questionnaire in French containing 9 items. We were able to analyze the responses of 329 medical students

Results: The median age of students was 22 years with a sex ratio of 0.3. Of the 329 participants, 88% had been made aware of the importance of respecting medical secret during their training, 71% had photocopied or photographed part or all of a patient's medical record (women $p=0.048$), 36% systematically introduced themselves to patients before a physical examination, and 88% had examined a patient in the presence of other patients and/or in a non-individual room. Ninety-two percent of students had observed unprofessional and/or unethical behavior primarily related to disrespect for patient dignity. Forty-seven percent had no opinion on gifts offered to physicians by pharmaceutical companies. Current ethics training was considered insufficient by 78%.

Conclusion: It is important to reinforce the values of confidentiality, responsibility and dignity among all those involved in the Tunisian healthcare system, including medical students

OC093. STATE OF KNOWLEDGE OF TUNISIAN PULMONOLOGISTS IN THE FIELD OF MEDICAL ETHICS

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Introduction: Medical ethics is the main pillar of the practice of medicine for any doctor, regardless of his or her specialty. Aim: Assess the state of knowledge of Tunisian pulmonologists in the field of medical ethics.

Methods: Cross-sectional study conducted over one month, based on a Google Forms questionnaire distributed to Tunisian pulmonologists, via mailing and a free instant communication service. This questionnaire has five parts: demographic and professional data (9 questions), training history in medical ethics (2 questions), medical confidentiality (15 questions), medical certificate (2 questions) and code of medical ethics (3 questions).

Results: A total of 108 valid responses were collected (mean age of participants=37 years; gender-ratio F/M=4.7; average seniority in the specialty= 10 years; training history in medical ethics=59% (during medical studies at the faculty for 83%)). The participants were: residents

(40%), university hospital assistants (12%), professors (27%), and pulmonology specialists (21%). Residents were in the 1st year of the course (24%), 2nd year (16%), 3rd year (20%), and 4th year (40%). The average score obtained for all questions was 31.5/46 (medical confidentiality=19.2/29, medical certificate=6.8/10, and code of medical ethics=5.3/7). The average obtained in the medical certificate part was correlated with age ($p=0.042$) and seniority in the specialty ($p=0.018$) and as for the medical confidentiality part, it was correlated with the history of training in medical ethics ($p<0.0001$).

Conclusion: The level of knowledge of Tunisian pulmonologists in the field of medical ethics is satisfactory and remains dependent on the training history in medical ethics and seniority in the specialty

OC094. SCENARIO-BASED VIRTUAL PATIENT: IMPACT ON LEARNING AND MOTIVATION OF OCCUPATIONAL MEDICINE LEARNERS

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Introduction: Medical training is a blend of theory and practice. However, the prevailing didactic approach hinders the development of critical thinking skills due to limited interaction, potentially compromising effective learning and clinical decision-making. A virtual patient-based approach is proposed to enrich student learning by simulating authentic clinical environments and fostering the development of theoretical knowledge and clinical decision-making skill. Aim: To evaluate a virtual patient training program on the learning and motivation students.

Methods: Quasi-experimental study involving 3rd-year medical students at the Faculty of Medicine in Soussse. Two groups were formed: the first (control group) was taught using the didactic method (clinical case and power point support) and the second (experimental group) was taught using the virtual patient approach. Learning was assessed by means of a pre-test and a post-test, and learner satisfaction was assessed by using an evaluation grid.

Results: A total of 46 students took part in this course, 23 in the control group and 23 in the experimental group. The average pre-test score was 3.6/6 for the control group versus 3.7/6 for the experimental group, with no significant difference ($p=0.87$). After the teaching sessions, the average post-test score was 4.6/6 for the control group versus 5.1/6 for the experimental group, with a significant difference ($p=0.006$). Overall satisfaction was 8.08/10 for the control group versus 8.8/10 for the experimental group ($p=0.008$).

Conclusion: These Results suggest that the adoption of virtual technologies, such as virtual patients, can enrich

the learning experience, stimulate student engagement and improve educational outcomes in Medicine.

OC095. LOW-FIDELITY SIMULATION LEARNING: COMPARISON BETWEEN PARTICIPANTS AND OBSERVERS

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Introduction: Role-play learning is an increasingly popular simulation method in the medical field. It is essential to assess the pedagogical value of these experiences to determine whether they can have the same positive effect on the knowledge, skills and know-how of medical students. Aim: To compare stress levels between observers and participants in a role-playing simulation session.

Methods: Prospective, descriptive, randomized study involving learners in their 5th year of medical school. Students were randomized into two groups (participant group (P) and observer group (O)) to participate in or observe a role-playing session on chest pain. Educational messages were given during the debriefing. A pre-test and a post-test were administered.

Results: Nine students participated in the study. Three in group P and six in group O. The mean age of both groups was 23±1 years. The pre-test mean was 6.09±1.52 in group P and 5±1.09 in group O. The post-test mean was 8.75±1 in group P and 6.33±0.51 in group O. There was as much improvement in group P as in group O (p=0.13). There was a clear improvement in severity ratings in group O, but the difference was not statistically significant (p=0.2). The level of perceived stress was higher in group P: 6 ± 1 versus 2.25 ± 1.54 (p=0.04). Students in both groups were similarly satisfied with the session (p=1).

Conclusion: Regardless to the small sample size, our study did not show any inferiority in learning when the learner is an observer rather than an active participant in the role-play.

OC096. APPLICATION OF CLINICAL REASONING TRAINING SESSIONS TO 3RD CYCLE MEDICAL STUDENTS

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Introduction: Clinical Reasoning Sessions (CRS), which enable contextualized, student-centered learning, are primarily used during clerkships. The aim of this study was to evaluate the feedback of 3rd cycle medical students to CRS teaching, and the impact on their practices.

Methods: Prospective study included residents assigned to the medical resuscitation department of the University Hospital of Bizerte during the year 2023 and having benefited from teaching by three CRS sessions. A questionnaire was completed by learners at the end of the learning process to evaluate this teaching. Data were analyzed using SPSS.23 software.

Results: Twelve residents took part in this apprenticeship. Their feedback on the organization was generally positive. All agreed that: the length of the session, Additionally, 11 appreciated the general atmosphere. In terms of scientific interest, most were satisfied with: the relevance of the theme (nine), the clarity of the vignette (all), the usefulness of the paraclinical examinations and the authenticity of the case (11). Assessment of pedagogical value revealed that 11 participants strongly agreed that: their participation was active, the sessions were interactive and the tutor facilitated the group well. Most felt that CRS would have a positive impact on the progression of their reasoning (10) and their practices. The majority were satisfied overall (9) and felt that CRS had a legitimate place in teaching (10).

Conclusion: The CRS is an appropriate way of supervising 3rd cycle medical students, provided that the topics covered are adapted to their internship objectives and the complexity of the cases to their level.

OC097. ADVANCING HEALTHCARE EDUCATION: THE EFFECTIVENESS OF VIDEO TRAINING ON BLOOD CULTURE KNOWLEDGE

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Introduction: Continuous training of healthcare providers using modern audio-visual tools represents a new approach in healthcare education. Our research aims to evaluate the impact of an educational video on the knowledge of healthcare providers regarding blood culture.

Methods: This was a comparative descriptive study conducted among 50 healthcare providers in the Department of Pediatrics C at the Children's Hospital in Tunis. We assessed the knowledge of healthcare providers regarding blood culture before and after watching an educational video.

Results: Fifty pediatric nurses were included in our study. We observed an average level of knowledge among healthcare providers regarding the blood culture technique, with a score of 47.52± 5.51 [31-58] out of 80. Our study showed a significant improvement in the knowledge score of healthcare providers regarding blood culture, which significantly increased after viewing the educational video (47.52 ± 5.51 [31-58] in the pre-test versus 70.24 ± 5.15 [60-80] in the post-test; p ≤ 0.05).

Conclusion: The use of an educational video in the training of healthcare providers showed a positive impact

on their knowledge regarding blood culture.

OC098. VIRTUAL REALITY AS AN EDUCATIONAL TOOL IN MEDICAL SCIENCES

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Introduction: Originally designed for military and recreational purposes, virtual reality (VR) is now gaining traction in healthcare, enhancing active and experiential learning. Despite advancements, data on VR use in medicine remain limited. We aimed to evaluate the interest of virtual reality in clinical learning in medical sciences among fourth-year medical students (DCEM 4).

Methods: This quasi-experimental before-and-after study evaluates a VR training program for fourth-year medical students in the general surgery and anesthesia-intensive care departments at Sahloul University Hospital. The evaluation includes a pre-test, a post-test, and a satisfaction questionnaire for the learners.

Results: Twelve fourth-year medical students participated in our study, none of whom had previously experienced VR learning. The average pre-test score was 8.8/20, which increased to 15.75/20 after the VR learning session. The majority of participants rated this new experience as excellent (9 students, or 75%), while the remaining 3 (25%) rated it as good. All participants expressed strong enthusiasm for participating in similar experiences in the future and recommended the integration of VR as a learning method in medical schools. VR has considerable potential to significantly transform the healthcare sector. It offers major advantages in various areas, ranging from medical science education to clinical practice and mental health management. Although challenges remain, it is evident that VR will continue to evolve and develop in the medical field.

Conclusion: To ensure the successful integration of this technology, it is crucial to find an optimal balance between technological innovation and human interaction to ensure high-quality care delivery.

OC099. THE CONTRIBUTION OF SIMULATION TO INTERDISCIPLINARY TEACHING FEEDBACK FROM RADIOLOGISTS AND ANESTHESIOLOGISTS

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Introduction: The concept of interdisciplinary teaching is based on the idea that the collaboration required in the workplace requires prior preparation, involving training

adapted to diverse groups with different statuses and specialities. By reproducing real-life working conditions, simulation is proving to be a particularly well-suited learning method for this type of training, preparing professionals to collaborate effectively in interdisciplinary contexts. Aim: To evaluate the impact of a simulation-based training program on an interdisciplinary audience consisting of radiology and anesthesia/resuscitation staff.

Methods: This observational, descriptive and prospective study was carried out in September 2023 at the simulation center of the Faculty of Medicine in Sousse. It involved a group of residents and senior radiology and anesthesia technicians. A simulation-based training program was set up for this group, with pre- and post-test evaluations. The impact of the training was measured by improvement in correct response rates (CRR).

Results: Our study enrolled 23 participants. For the first session, pre-test CRRs ranged from 4.8% to 81%. Post-test CRRs ranged from 4.8% to 95.2%. The best improvement was in question A2 (delta CRR=52.4%). For the second session, pre-test CRRs varied from 7.5% to 100%. Post-test CRRs ranged from 14.3% to 100%. The best improvement concerned question B 13 (delta TBR=47.7%). The most developed non-technical skill was "teamwork". Satisfaction rates ranged from 80% to 100% for the Briefing, from 50% to 100% for scenario quality, from 94.7% to 100% for debriefing quality, and from 94.7% to 100% for instructor performance.

Conclusion: Interdisciplinary simulation teaching enriches professional training by fostering greater collaboration between disciplines.

OC100. TEAM PERFORMANCE TRAINING FOR MILITARY MEDICAL STUDENTS: LOW VS HIGH FIDELITY SIMULATION

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Introduction: This study aims to evaluate a simulation-based team performance course for military medical students (Tactical combat casualty care called TC3) and compare its low- and high-fidelity components.

Methods: This is a prospective crossover observational study. Groups participated in one low- and one high-fidelity session twice. Low-fidelity scenarios included the management of casualty injuries by an improvised engine device (IED) on a simulated patient. High-fidelity scenarios comprised multiple trauma cases where simulated patients wore a hyper-realistic suit (Sim man 3G+ manikin). Team performance was assessed objectively, using the TEAM™ tool, and subjectively using questionnaires. Questionnaires were also used to assess awareness and stress management

Results: 22 students attended the training. Participants' team performance was higher in the low-fidelity intervention as assessed by the TEAM™ tool. An overall mean increase in self-assessed confidence towards non-technical skills (NTS) attitudes was noted after the

course, however, there was no difference in self-assessed performance between the two interventions. Both reported mean stress and presence levels were higher for the high-fidelity module. Evaluation scores for all individual items of the questionnaire were ≥ 4.70 in both NTS modules. Students assessed the high-fidelity part higher (4.90 out of 5, SD = 0.26) than the low-fidelity exercise (4.73 out of 5, SD = 0.65).

Conclusion: Both the low- and high-fidelity training showed an improvement in team performance of the attending medical students. The high-fidelity intervention was more realistic, yet more stressful. Furthermore, it proved to be superior in harvesting non-technical skills.

OC101. EVALUATING LEARNER SATISFACTION WITH SIMULATION-BASED HEALTH TEACHING

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Introduction: Simulation is an essential teaching tool in the training of medical students. It is widely used in intensive care to learn technical and non-technical skills. The emotional experience of learners varies according to their profile, the complexity of the case, and the quality of the debriefing. Assessing learner satisfaction is the first stage of evaluation according to Kirkpatrick's classification. **Objective:** To assess the degree of satisfaction of acute medicine residents during a hybrid simulation session.

Methods: Prospective, observational, monocentric study conducted at Bizerte Hospital in 2023. In situ hybrid simulation training in airway management of a patient in respiratory distress was provided for acute medicine residents and evaluated by a pre- and post-test.

Results: A total of 16 residents participated in four simulation sessions (4 residents per session). The mean age was 27 ± 1 years and the gender ratio 0.53. They were mainly medical intensive care (5) and anesthesia intensive care (4) residents enrolled in their first (7) and second (7) years. Previous participation in simulation sessions was reported by 12 learners. Their mean stress levels were significantly higher post-simulation (4.82 ± 1.43 versus 4.25 ± 1.3 ; $p < 10^{-3}$). In addition, they were more likely to describe positive emotions in pre- and post-learning, with proportions of 40% and 60% respectively. All learners felt that this teaching was very beneficial, and 15 students were satisfied overall. In addition, 13 felt that this learning experience would have a positive impact on their future practice.

Conclusion: Despite limited resources, simulation-based teaching was appreciated by most learners with good overall satisfaction.

OC102. ASSESSMENT OF LEARNERS DURING A RESEARCH REASONING LEARNING SESSION

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Introduction: A research reasoning learning session improves critical reading of a scientific article. The aim was to evaluate the degree of knowledge acquisition during a research reasoning learning session.

Methods: We conducted a prospective descriptive study including medical students doing their acute medicine placement in the emergency department. A research-based learning session on the theme of acute pericarditis in the emergency department was organized, during which the learners were assessed twice by a pre-test and a post-test in the form of an evaluation grid covering the different parts of the scientific article studied.

Results: Ten learners took part in the session. Their average age was 23 ± 1 years and their sex ratio was 1.5. An improvement in overall score was noted in all learners, with a significantly higher median post-test score ($p = 0.0001$). The evaluative study showed an improvement in the overall score of over 50% in 4 patients. The inter-group evaluative study showed no statistically significant difference in overall grade improvement ($p = 0.58$), in the number of learners who improved their grade ($p = 0.05$) or in the percentage of improvement ($p = 0.3$). The average satisfaction value was 24 ± 0.9 and the degree of stress was on average estimated at 2 ± 1 .

Conclusion: During a research-based learning session, the learner benefits from learning with the same level of skill acquisition and without stress levels.

OC103. IMPACT OF TEACHING CRITICAL THINKING PRINCIPLES ON PROBLEM-BASED REASONING LEARNING APPLIED TO POSTGRADUATE EMERGENCY MEDICINE EDUCATION

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Introduction: Critical thinking is a high-level thinking process that can be used in conceptual learning for students. The purpose of the study is to assess the perceived educational relevance by participants and its impact on postgraduates' education in emergency medicine (EM) and on their decision-making process.

Methods: A two-phase study was conducted. EM residents underwent a two days workshop on critical thinking definition, principles and competency development tools. Then the same residents attended a second workshop on emergency department-related problem-based reasoning learning with three scenarios elaborated for their education level. Assessment was conducted using a pre- and a post-test for each workshop, the critical thinking scoring rubric of the CTLT-Washington State University and the Likert satisfaction scale.

Results: The study was conducted for one year. Two

cohorts of 12 emergency medicine residents completed the training. Critical thinking was a new concept for 83.5% of participants. Half of the participants scored developing competencies while 32.5% of them scored emerging and only 16.5% participants scored mastering the principles of critical thinking. The overall progression rate of participants through problem-based reasoning learning was 62% [39-74]. Satisfaction rate was of 100% very satisfied.

Conclusion: In our study, only 16.5% of participants scored mastering critical thinking concepts and principles, more training is needed as 50% of participants were categorized with potential capacity of developing competencies on critical thinking

OC104. "PATHO-PLAY": AN EXCITING JOURNEY INTO THE WORLD OF PATHOLOGY FOR MEDICAL STUDENTS

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Introduction: Serious games have proven to be valuable tools in medical education, fostering active learning and increased student engagement. However, there is a lack of research on the use and effects of serious games in pathology education, specifically among third-year medical students during anatomic pathology rotations. This study seeks to assess medical students' satisfaction and interest in Patho-Play, a dedicated serious game developed for pathology education.

Methods: In this prospective study conducted between 2023 and 2024, third-year medical students engaged in anatomic pathology rotations. The study introduced "Patho-Play", a serious game developed using the "VTS Editor" software. Featuring avatars, scores, and explanations, the game provided a virtual pathology laboratory experience accessible on computers. The estimated playtime for "Patho-Play" was 45 minutes.

Results: The study highlights the effectiveness of "Patho-Play", a serious game, in enhancing medical student satisfaction and engagement in pathology education. The game's interactive nature and scenario-based approach positively impacted students' diagnostic skills. Furthermore, students expressed interest in using serious games for other topics in their pathology curriculum. Overall, "Patho-Play" shows promise in improving pathology education outcomes.

Conclusion: The implementation of "Patho-Play", a serious game, effectively increases medical student satisfaction and active participation in pathology education. Through immersive scenario-based cases set in a pathology laboratory, students gain hands-on experience in analyzing images and slides to formulate precise diagnoses. The integration of serious games, such as Patho-Play, demonstrates a positive impact on diagnostic skills and overall educational achievements.

OC105. MASTERING TNM CLASSIFICATION WITH THE "TNM CHALLENGE" CARD GAME: FUN, EDUCATIONAL, AND ENGAGING

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Introduction: Understanding TNM cancer classification is crucial for healthcare trainees. However, there is a recognized need for innovative educational tools to bridge the knowledge gap and improve comprehension of TNM classification. To address this gap, we developed the "TNM Challenge", an educational card game aimed at enhancing participants' understanding of TNM classification

Methods: In this one-year prospective study (2023-2024), medical interns, pathology residents, and general surgery residents voluntarily participated. The TNM Challenge card game, developed with expert input and established TNM classification guidelines, featured organ cards, case cards, answer cards, and score cards tailored for this study. Pre-game knowledge assessments were conducted before the game session, followed by the administration of the TNM Challenge card game and post-game knowledge assessments. Observations were made during the game, and participants' feedback was collected through a post-game survey.

Results: The TNM Challenge card game effectively improved participants' understanding of TNM classification, enhancing their ability to identify T, N, M classifications and cancer stages. It facilitated active learning, critical thinking, and decision-making skills in cancer staging. Participants expressed high satisfaction and interest in integrating the game into their regular training curriculum.

Conclusion: The TNM Challenge card game enhances TNM cancer classification knowledge for medical interns, pathology residents, and general surgery residents. By providing an interactive learning experience, it addresses the existing gap in understanding TNM classification. Integration into medical education can promote active learning and improve comprehension among future healthcare professionals. Further research can explore its long-term impact and utility in clinical practice.

OC106. "THYRO-GUESS": ENHANCING RESIDENT ENGAGEMENT IN PATHOLOGY LEARNING THROUGH SERIOUS GAMING

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Introduction: Serious games have emerged as effective tools in medical education, promoting active learning and enhancing student engagement. However, there is limited research exploring the application and impact of serious games in pathology education, specifically among residents in anatomic pathology. This study aims to assess resident satisfaction and interest in a serious game designed for pathology education, aiming to contribute to the understanding of serious game utilization in medical education.

Methods: This prospective study was conducted over a one-year period (2023-2024) and included residents in anatomic pathology who agreed to participate. The serious game utilized in this study was a simulation-based game developed using the "VTS Editor" software, incorporating avatars, scores, and explanations. The specific health topic addressed in the game was Thyroid Papillary Carcinoma. The virtual environment of the game was set in a pathology laboratory, and it was designed to be played on a computer with an estimated playtime of 30 minutes.

Results: Preliminary Results indicate high levels of resident satisfaction with the serious game, suggesting its potential as an engaging and educational tool. The majority of residents found the game interactive and effective in enhancing their diagnostic skills. Furthermore, residents expressed a strong interest in incorporating serious games into their pathology education curriculum for other topics as well.

Conclusion: This study highlights the potential of serious games in enhancing resident satisfaction and interest in pathology education. Incorporating serious games into pathology curricula can improve diagnostic skills and overall educational outcomes for future pathologists.

OC107. INTEREST OF MULTIDISCIPLINARY WORKSHOPS FOR THE CONTINUING EDUCATION OF PARAMEDICS

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Introduction: Continuing education for both doctors and paramedical staff is the main pillar of good patient care with close and fluid collaboration between the various stakeholders. Aim: Evaluate the contribution of a workshop led by doctors from different specialties around a common subject, in the continuing education of paramedics in a university hospital center in Tunis.

Methods: Cross-sectional study conducted with 16

paramedics who participated in a face-to-face training course on the management of a patient with SARS-CoV-2 hypoxemic lung disease. This training took place in 3 parts: Management of the patient suspected of SARS-CoV-2 infection in the emergency room, then in the medical department, and finally in the intensive care unit. Participants completed an anonymous pre- and post-Test questionnaire, comprising 8 questions, 5 of which were multiple-choice and 3 objectively short answer (total score of 28). At the end of the training, they answered an anonymous satisfaction questionnaire with 7 questions.

Results: The average of the scores obtained at the pre- and post-test were $9.75 \pm 3.7/28$ and $14 \pm 3/28$ respectively. These scores varied from 2/28 to 13/28 at the pre-test and from 11/28 to 21/28 at the post-test with a statistically significant improvement at the post-test ($p < 0.001$). All participants were satisfied with the quantity and quality of information provided and would advise others to participate in this training.

Conclusion: Continuing education for paramedical staff, particularly those provided in multidisciplinary training for a common subject, seems to be beneficial and associated with a significant improvement in the knowledge of the participants.

OC108. EVALUATION OF THE EFFECTS OF SERIOUS GAMES ON THE EDUCATIONAL TRAINING OF MEDICAL STUDENTS IN NUTRITION DEPARTMENT

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Introduction: Serious games (SG) are currently used more and more in the training of medical learners. The objectives of our study were to evaluate, among medical students, the effects of a SG in the form of an educational application on the training of our students in terms of theoretical knowledge and skills in diagnosis and therapeutic management.

Methods: A prospective, cross-sectional and descriptive study including 25 learners in the second year of medical studies at the Faculty of Medicine of Tunis in a Nutrition department. The SG used was an edutainment game based on scripting with a clinical vignette of a diabetic patient at high cardiovascular risk.

Results: The average age was $22 \pm 0,3$ years. A female predominance was noted with a gender ratio F/M=0,52. None of the learners had heard of SG before. The average score of our learners on the pre-test was $0,54 \pm 0,19$ with extremes ranging from 0 to 1. None of our learners passed the test. The average score of our learners on the post-test was $4,57 \pm 0,29$ with extremes ranging from 4 to 5. All learners had passed their theoretical knowledge test after the "modern" simulation or tutorial session ($p < 0,000001$). Before the serious game simulation session, only 16% of our learners were considered "competent" in terms of diagnosis and therapeutic management. At the end of the simulation session, all our learners had "acquired" skills or were judged "competent" in terms of diagnosis

and therapeutic management ($p < 0,000001$).

Conclusion: The Results of our work showed that SGs are beneficial in the training of learners.

OC110. FACTORS INFLUENCING CAREER CHOICE, DEGREE OF SATISFACTION, PERSPECTIVES AND MENTAL WELL-BEING OF TUNISIAN YOUNG GASTROENTEROLOGIST: A NATIONAL SURVEY

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Introduction: Choosing a medical specialty, is a lifelong career choice influenced by various factors. The aim of the study was to investigate key factors influencing professional choice and satisfaction among young gastroenterologists.

Methods: A voluntary and anonymous questionnaire was distributed to all gastroenterology trainees, focusing on specialty choice determinants, satisfaction over specialty and training, future prospects, and mental well-being evaluation.

Results: A total of 56 young gastroenterologists, with an average age of 28.13 years, responded to the survey. The distribution was as follows: 19.6% had completed the fourth-year of training, 23.2% were in 3rd and 4th year, 17.9% in 2nd year, and 16.1% in 1st year. Motivations of the choice included an interest in endoscopy (75%), the diversity of pathologies (66.1%), private practice opportunities (50%), and interest in non-surgical specialties (50%). Endoscopy was the most attractive field (89.3%), followed by hepatology (62.5%), inflammatory bowel diseases (53.6%), pancreatology (8.9%), and proctology (8.8%). Most participants valued work-life balance (98.2%) and remuneration (87.5%). Needed improvements included better endoscopic training and working conditions (83.9%), theoretical teaching (46.4%), internship site choice (39.3%), and potential income (35.7%). After starting training, 87.5% were still convinced of their choice. For professional prospects, 10.7% considered a hospital-university career, 23.2% private practice, 23.2% going abroad, while others were uncertain. In the future, 75% plan to actively participate by joining national or international societies. Regarding mental well-being, 30.4% had anxiety disorders, and 10.7% had depressive disorders.

Conclusion: Understanding the determinants influencing the career choices and identification of training weaknesses are paramount for shaping future experts.

OC111. PLATELET-TO-HEMOGLOBIN RATIO AS A PROGNOSTIC MARKER IN GASTRIC CANCER PATIENTS

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Introduction: Anemia and thrombocytosis have been linked to poor prognosis in various tumors, including gastric cancer. This study aims to evaluate the Platelet-to-Hemoglobin Ratio (PHR), which combines both parameters, as a predictor of progression-free survival (PFS) in patients with gastric cancer across all stages.

Methods: This retrospective cohort study included all inpatients diagnosed with gastric cancer at our department over the past 5 years, of all disease stages. Clinical and biological data were collected from medical records. PHR's predictive performance was evaluated using Receiver Operating Characteristic (ROC) curve analysis and the Area Under the Curve (AUC). Survival analysis was conducted using the Kaplan-Meier method and Cox regression.

Results: Fifty-six patients were included, with a mean age of 57 ± 14 years, and 55.4% male. Stage IV disease was more common (50%) compared to stages III (23.2%), II (14.3%), and I (12.5%). Twenty-four patients (42.9%) underwent gastrectomy, 20 patients (35.7%) received palliative chemotherapy, and 12 patients (21.4%) received only hospice care. During follow-up, tumor progression occurred in 40 patients (71.4%). PHR showed good predictive value with an AUC of 0.84. A cutoff of 26 had 88% sensitivity, 72% specificity, 93% negative predictive value, 56% positive predictive value, and 76% diagnostic accuracy. A baseline PHR value of 26 or more increased the risk of tumor progression by 4-fold (HR: 4.4, CI95%: 2.1–9, $p < 0.001$).

Conclusion: The PHR effectively predicts PFS in gastric cancer patients, suggesting its potential as a valuable prognostic tool. Larger studies are needed to further validate PHR and its utility across different subgroups.

OC112. PREDICTIVE FACTORS FOR SURGICAL INTERVENTION IN DUODENAL STENOSING ULCER

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Introduction: Treating stenosing duodenal ulcers (SDU) is often successful with medical therapy or endoscopic dilation. However, some cases may require surgical intervention. This study aimed to identify risk factors for surgery in patients with SDU.

Methods: This retrospective monocentric study included patients with SDU admitted over the past 20 years. SDU was defined by peptic ulcer with pyloric canal impassable narrowing at endoscopy. All patients received proton pump inhibitors (PPI) initially. Logistic regression was used to determine independent predictors of surgery.

Results: A total of 115 patients were included, with a mean age of 51 ± 15 years and 83.5% male. Most were smokers (73%), and 39% had a history of peptic ulcer. Severe vomiting was observed in 68.7%, with a median duration of 3 weeks. Helicobacter pylori (HP) infection was present in 95.3%. Recurrence after initial remission

occurred in 24.3%, and 61% did not respond to PPI. Endoscopic dilation was required in 63.5%, and 27% (n=31) underwent surgery after a median of 6 weeks. Surgery was significantly ($p<0.05$) associated with younger age (45 vs. 53 years), lower hemoglobin level (11 vs. 13 g/dL), number of anti-HP regimens (2 vs. 1), PPI non-responsiveness (96% vs. 54.8%), recurrence (64.3% vs. 29.7%), and endoscopic dilation failure (70% vs. 10.2%). Multivariate analysis identified only hemoglobin level (OR: 0.6, CI95%: 0.3–0.9, $p=0.046$) and endoscopic dilation failure (OR: 11, CI95%: 1.7–72.8, $p=0.040$) as independent risk factors.

Conclusion: Lower hemoglobin levels and endoscopic dilation failure are significant indicators of surgical intervention in SDU, aiding early decision-making and improving outcomes.

OC113. FACTORS INFLUENCING THE QUALITY OF LIFE IN CIRRHOTIC PATIENTS

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Introduction: Cirrhosis is a chronic liver disease that, due to its natural progression and complications, affects the quality of life (QOL). Tunisian data related to the QOL of cirrhotic patients are limited. Our objectives were to evaluate the QOL of cirrhotic patients and identify the factors influencing it.

Methods: We conducted a cross-sectional study, including cirrhotic patients followed in our outpatient clinic. QOL was assessed using the following questionnaires: Chronic liver disease questionnaire (CLDQ), 36-item short form (SF-36), The Hospital anxiety and depression scale. Patient data regarding medical history, cirrhosis characteristics, and socio-economic conditions were collected. Statistical analysis was performed using the SPSS software.

Results: One hundred (56 women and 44 men) were included, with an average age of 60.62 years. The cirrhosis was due to viral hepatitis in 55% of cases with a CHILD-PUGH score classified as B or C (49 cases). Thirty-four patients had a history of upper gastro-intestinal bleeding. Thirty patients presented with ascites. The mean SF-36 was 54.06, and the mean CLDQ was 4.7. Twenty-five patients experienced anxiety, and 35 had depression. In multivariate analysis, the factors influencing the SF-36 were the education level, the CHILD-PUGH score, the presence of esophageal varices or ascites, anemia, and low serum albumin levels. The factors influencing CLDQ were the CHILD-PUGH score, the presence of ascites, anemia, and low serum albumin levels. A CLDQ below five was associated with a CHILD-PUGH score B or C, the presence of ascites, a portal vein thrombosis, and low serum albumin levels.

Conclusion: The Results of our study highlight the importance of assessing QOL during cirrhosis and developing comprehensive care for our patients.

OC114. SURVEY ABOUT THE USE OF CHATGPT IN THE

PRACTICE OF TUNISIAN GASTRO-ENTEROLOGISTS

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Introduction: Artificial intelligence and large language models like ChatGPT are promising new technologies willing to be transformative for healthcare landscape, though they also present challenges and limitations. The primary aim of this study was to assess the various applications, benefits and limitations of using ChatGPT in the field of gastroenterology among practitioners.

Methods: A cross-sectional study among Tunisian gastroenterologists, used a 17-question anonymous online survey to explore the use of ChatGPT in gastroenterology.

Results: We included 72 gastroenterologists with a mean age of 34.22 years including junior doctors (47.2%), hospital-university physicians (31.9%), public health physicians (11.1%), and private practice physicians (9.7%). Reasons for non-users (38.5%) were lack of familiarity (n=12), lack of interest (n=10), principle-based refusal (n=8) and lack of confidence (n=6). Among users (59.7%), 31.9% used it rarely, 8.3% monthly, 15.3% weekly, and 4.2% daily. Usage was highest among juniors (33% vs 10%, $p<0.0001$). Fields of application included rewording, translation, email writing, presentation preparation, medical writing assistance, information searching, teaching and diagnosis assistance. The main benefit was time savings (86.9%), followed by improved medical writing (54.3%) and decision-making assistance (10.8%). Limitations included superficial responses (55.5%), reliability concerns (55.5%), misunderstanding of medical terms (53.3%), need for validation (37.7%), integration difficulties (22.2%), and data confidentiality concerns (17.7%). Quality was rated moderately reliable (74%), somewhat unreliable (24%), and extremely reliable (2%). Finally, 90.4% would like a gastroenterology-specific AI model.

Conclusion: Our Results highlight the potential of ChatGPT, while also emphasizing the need for further refinement and the proposal of a dedicated gastroenterology platform.

OC115. IMPACT OF PHYSICAL ACTIVITY ON DIABETES

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Introduction: Diabetes is one of the most widespread diseases worldwide. Lifestyle interventions including physical activity (PA) play a major role in preventing and managing this chronic disease. The aim of our study was to assess the level of PA in patients with diabetes, and to establish the link between adherence to World Health Organisation (WHO) recommendations on PA and

glycemic control.

Methods: A cross-sectional study was conducted over a period of six months in the Internal Medicine Department of Internal Security Forces Hospital. The study involved adult participants aged 18 years and older with Diabetes who had provided informed consent. Data on PA were collected using the Global Physical Activity Questionnaire (GPAQ), translated into the Tunisian dialect.

Results: We enrolled 59 patients, 32 were female, with a mean age of $58,9 \pm 9,1$ years. Less than 5% of patients were aware of the WHO guidelines on PA. Based on the GPAQ, patients were classified according to their PA levels: low (45,7%), moderate (49,2%), and high (5,1%). Sixty-one percent of patients followed WHO guidelines. Fasting plasma glucose levels were significantly lower ($p=0,036$) in diabetic patients who adhered with WHO recommendations ($1,38 \pm 0,3$ g/l VS $1,8 \pm 0,8$ g/l) similarly for glycated hemoglobin ($7,2 \pm 0,9\%$ VS $8,3 \pm 2\%$ with $p=0,018$)

Conclusion: Our study confirms the well-established relationship between diabetes and PA. These Results emphasize the necessity of implementing therapeutic education programs and enhancing patient awareness about the necessity of adhering to PA guidelines and reducing sedentary behavior.

OC116. FOLIC ACID SUPPLEMENTATION FOR PREGNANT WOMEN WITH DIABETES

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Introduction: Several micronutrients are important during pregnancy, including folic acid, which is implicated in the prevention of neural tube closure anomalies. The aim of our study was to investigate the spontaneous intake and prevalence of folic acid supplementation.

Methods: This is a descriptive cross-sectional study of 54 pregnant women at the Diabetes and Pregnancy Unit of the National Institute of Nutrition in Tunis.

Results: The mean age of the patients was 34.78 ± 5.76 years. The majority (48%) were in the 2nd trimester of pregnancy, 35.2% were in the 3rd trimester. 85.2% of patients were using dietary supplements during their current pregnancy. Our entire population was folic acid deficient, with only 48.1% of pregnant women receiving supplementation. Mean spontaneous folic acid intake was 269.46 ± 83.09 mg/d, which appears to be inadequate. The majority of these women (56.5%) used folic acid only during the first trimester of pregnancy. 10% of women used folic acid before conception, while 21.7% of the population did not take folic acid despite a medical prescription.

Conclusion: Our study highlights the frequent inadequacy of folate intake through the diet, underlining the importance of supplementation given the crucial role of this vitamin during pregnancy, for both mother and fetus.

OC117. STUDY OF EATING BEHAVIOR IN OBESE TUNISIAN ADULTS

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Introduction: Obese individuals are exposed to various eating disorders. However, the study of eating behavior is not limited to just identifying these disorders. Several components need to be evaluated to ensure a comprehensive assessment of eating behavior, which is often disrupted in obese patients. This study aimed to analyze the eating behavior in its entirety among 79 obese patients.

Methods: A descriptive observational, cross-sectional study conducted at the Obesity Unit of Department A at the National Institute of Nutrition and Food Technology in Tunis, where we recruited 79 obese patients.

Results: The average age of our population was 45.91 ± 11.70 years, with a predominance of females (85%). The average BMI was 41.05 ± 6.94 kg/m². The diet was hypercaloric in 96% of cases and unbalanced in 100% of cases, with several deficiencies in micronutrient and fiber intake observed (such as a vitamin C deficiency in 53% of cases). In 92% of cases, our patients exhibited at least one eating disorder, mainly snacking and prandial hyperphagia, found in 85% and 76% of cases, respectively. Internal signals (hunger/satiety) were disregarded in more than half of the cases, and 75% of our patients ate meals in a group. The duration of food intake was less than 15 minutes in 47% of the obese individuals. Eating in front of screens was reported in 76% of cases.

Conclusion: According to the literature and our findings, eating behavior was often abnormal in obese individuals, highlighting the importance of systematic screening and early diagnosis of these disorders

OC118. NUTRITION AND COLORECTAL CANCER: ABOUT 100 CASES

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Introduction: Colon and rectal cancer, also called colorectal cancer (CRC), constitutes a real public health problem. Diet plays an important role in the etiopathogenesis of CRC. The objective of our study was to identify nutritional and environmental risk factors for CRC by comparing a population of patients with CRC to a control population.

Methods: This is a retrospective study involving 50 cancer patients, as well as 50 randomly selected controls recruited during the same period. The two groups (patients and controls) were matched for age and sex.

Results: The average age of the patients was 56.06 ± 14.24 years. For the control group, the average age was 52.52 ± 13.2 years. The average age of CRC diagnosis

in patients was 54±14.19 years. Malnutrition affected almost half of the patients, including 28% with severe malnutrition. The difference was statistically significant with p=0.006. Before the onset of CRC, patients had an average body mass index of 28.04 Kg/m² compared to that of controls which was 27.19 Kg/m². The difference was statistically significant with p=0.02. We compared the consumption of certain foods between patients and controls and we noted a statistically significant difference with the consumption of red meat at a rate of more than 500g/week (p=0.006) and tea (p=0.0001) which was a protective factor.

Conclusion: The incidence of colorectal cancer has continued to increase in recent years worldwide and in particular in Tunisia. Our study identified as risk factors for colorectal cancer: menopause, obesity, consumption of red meats and as a protective factor regular consumption of tea.

OC120. CATEGORY FOUR OF THE BREAST IMAGING REPORTING AND DATA SYSTEM ADVANTAGES OF DIVIDING INTO THREE SUBGROUPS

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Introduction: Category four of the Breast Imaging Reporting And Data System covers indeterminate breast lesions with a probability of malignancy ranging from 2 to 95%. This wide range justifies its subdivision into 3 subgroups: ACR4a, b and c. The aim of our study was to determine the value of this sub-classification and to provide external validation of this score.

Methods: This was a retrospective, evaluative study carried out in Ward C of the Tunis Maternity and Neonatology Center between January 2020 and June 2023, which enrolled patients with breast lesions classified as ACR4a, b or c with conclusive histological findings.

Results: We enrolled 102 patients with ACR4 breast lesions, 36 of whom were ACR4a, 32 ACR4b and 34 ACR4c. The most significant risk factors in our study were age (p<0.001) and family history of breast pathology (p to 0.002). Twenty-five percent of breast cancers were detected by breast ultrasound alone and 75% by a combination of ultrasound and mammography. Only irregular shape, uncircumscribed contours and Doppler vascularity were significant in predicting malignancy in our study (p values of 0.048, 0.005 and 0.001 respectively). ACR4a lesions had a PPV of malignancy of 11.1%, ACR4b lesions had a PPV of 56.3%, and ACR4c lesions had a PPV of 76.5%.

Conclusion: The sub-classification of BIRADS category 4 makes it possible to adapt the management of breast lesions and limit interventions. In the event of a discrepancy, a second sampling and a discussion in RCP staff are indicated.

OC124. TARGETED NEWBORN SCREENING FOR CMV EMBRYO-FOETOPATHY

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Introduction: Congenital cytomegalovirus (cCMV) is the most common congenital infection. Around a quarter of infants may suffer lifelong consequences, including hearing loss and neurodisability. Although screening of cCMV infection has been developed in recent years, it is not yet in routine use in Tunisia. AIM: To analyse the indications and Results of targeted screening for cCMV.

Methods: This was a retrospective and descriptive study carried out over a four-year period (From January 2021 to June 2024) in the neonatal department of the Charles Nicolle Hospital in Tunis, including all newborns who underwent CMV polymerase chain reaction studies on a urine specimen. The indication for postnatal screening was based on clinical, biological or radiological signs.

Results: During the study period, CMV PCR was performed in 139 newborns with a mean term of 37±2.8 weeks, a mean birth weight of 2.4kg±0.64. Screening was prompted by anomalies detected during prenatal monitoring in 37 cases (26.6%), with oligohydramnios in 26 cases (18.7%) and ventricular dilatation in eight cases (5.8%). Hypotrophy was the main indication for screening (61.9%), followed by jaundice (56%), microcephaly (45%), facial dysmorphism (3.6%), petechiae (2.9%), convulsions (1.4%), hypotonia (1.4%). Biological abnormalities were: thrombocytopenia (7.5%), anaemia (7.2%), neutropenia (2.9%), cholestasis (7.9%) and cytolysis (6.5%). Transfontanellar ultrasound was pathological in 18 cases: Ventriculomegaly (n=11), subependymal cysts (n=4) and calcifications (n=3). Among the neonates included, seven tested positive for CMV PCR and received antiviral treatment, resulting in good clinical and biological outcomes.

Conclusion: Our study highlighted the antenatal and postnatal indications for targeted screening for CMV embryofetopathy. The treatment primarily aims to improve neurosensory prognosis.

OC125. PRENATAL DIAGNOSTIC DECISION-MAKING AT A LEVEL 3 MATERNITY CENTER: A YEAR IN REVIEW

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Introduction: The Maternity and Neonatology Center of Tunis, a level 3 maternity center, is crucial for prenatal diagnosis. Its multidisciplinary prenatal diagnosis committee faces increasing consultation demands, addressing challenges such as confirming antenatal diagnoses, evaluating prognoses, managing pre- and

postnatal care, deciding on medical terminations of pregnancy, and navigating ethical and legal issues. This study describes the reasons for consultations at the prenatal diagnosis committee and the resulting decision-making processes

Methods: We conducted a retrospective descriptive study of all cases presented to the committee over one year (January 2023 - December 2023).

Results: During the study period, 363 cases were presented. The primary reasons for consultations were fetal causes (n=270). The average gestational age at diagnosis was 20 weeks (range: 16-35 weeks). The most frequently detected anomalies were cardiovascular anomalies (n=51), urinary tract malformations (n=37), intrauterine growth retardation (n=36), and nervous system anomalies (n=33). Chromosomal aberrations were identified in 26 fetuses. Terminations of pregnancy was indicated in 15.9% of cases due to severe or lethal fetal conditions or maternal reasons. In 84% of cases, continuation of pregnancy was justified due to non-lethal, non-severe, or treatable anomalies. For non-feasible terminations of pregnancy (advanced gestational age (>26 weeks) or parental refusal) accounting for 30% of indicated terminations of pregnancy, palliative care was provided for live births.

Conclusion: High-quality prenatal diagnosis requires close collaboration among specialties, adequate training for healthcare personnel, especially sonographers, and a national prenatal screening program for early diagnosis and improved management.

OC126. IMPLEMENTATION OF AN ERROR ROOM TO ENHANCE IDENTITOVIGILANCE AND INFECTION PREVENTION IN A NEONATAL INTENSIVE CARE UNIT

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Introduction: Ensuring patient safety through effective identitovigilance and infection prevention is critical in neonatal intensive care units. This study evaluated the efficacy of a simulated error room to identify and correct common errors related to patient identification and infection control.

Methods: The study included senior physicians, pediatric technicians, and neonatal residents of the Neonatology Department of The Maternity and Neonatology Center of Tunis. They participated in a simulated error room exercise designed to mimic common errors in identitovigilance and infection prevention. Participants were given 15 minutes to identify as many errors as possible. Following the exercise, a debriefing session was conducted to review the errors and provide additional information on best practices. The satisfaction was assessed by means of a self-questionnaire.

Results: Fifty participants were enrolled. On average, 19 errors were detected out of the 25 errors predicted in the scenario, i.e. 76% error detection. Levels of detection accuracy varied significantly ($p=0.02$) based

on the participants' professional roles (medical versus non-medical). For pediatric technicians, detection rate increased with years of experience (over 5 years) ($p=0.03$). The infectious risk was the type of error that has been detected the least and on the contrary, identification errors were those detected the most. We observed that the level of difficulty was not perceived in the same way depending on the professional role. Ninety percent of the participants were very satisfied with their experience.

Conclusion: Regular implementation of error room simulations could improve patient safety by continuously updating and reinforcing best practices among healthcare professionals.

OC127. METABOLIC ACIDOSIS AT BIRTH: INCIDENCE, RISK FACTORS, AND OUTCOMES

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Introduction: Impaired utero-placental gas exchange can occur in the fetus under certain obstetric conditions, leading to altered cellular metabolism and metabolic acidosis. We aimed to determine the incidence, risk factors, and outcome of neonatal metabolic acidosis at birth.

Methods: This prospective descriptive study was conducted over a 6-month period (February-July 2024) in the maternity department. It included neonates who underwent umbilical cord blood gas analysis at birth, indicated in cases of non-reassuring fetal status. Metabolic acidosis was defined as a $pH \leq 7$ and/or a base deficit ≥ 12 mmol/L.

Results: We included 108 neonates. Fetal heart rate abnormalities were observed in 66.7% of cases, including bradycardia (10.2%), repetitive decelerations (33.3%), and micro-oscillatory patterns (23.1%). Meconium-stained amniotic fluid was present in 10.2% of cases. Vaginal delivery occurred in 24.1% of cases, and instrumental delivery in 7.4% of cases. The mean gestational age was 38.5 ± 1.6 weeks (34.3-42.3 weeks) and the mean birth weight was 3075 ± 529 g (1500-4280g). Cord blood gas analysis revealed a mean pH of 7.21 ± 0.15 (6.51-7.45), a mean base deficit of 8.4 ± 5.6 mmol/L (1-33 mmol/L), and a mean lactate level of 4.5 ± 3.4 mmol/L (1.4-28.2 mmol/L). Metabolic acidosis was observed in 23.1% of cases. It was more common in vaginal deliveries (65.4% vs 8.5%, $p < 0.001$) and in male neonates (29.3% vs 14%, $p = 0.056$). Two patients developed hypoxic-ischemic encephalopathy. One patient died from multiple organ failure. The mean length of hospital stay was 4 ± 3 days (1-20 days). Median follow-up was 15 days (4-150 days).

Conclusion: Our study showed a high incidence of metabolic acidosis at birth, particularly in male newborns and in cases of vaginal delivery, with generally favorable outcomes.

OC128. MANAGEMENT OF PAIN IN THE NEWBORN: A PROSPECTIVE STUDY

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Introduction: Neonatal pain has been ignored for a long time. With the progress of health care, neonatal pain is now a scientific reality and an essential part in the neonatal care which requires evaluation and treatment.

Methods: We have developed a prospective, comparative, randomized study which was conducted in the Pediatrics department, from January 2022 to February 2022. This study focused on the evaluation of analgesic effects in full-term neonates who should undergo venipuncture for blood sampling as part of care.

Results: We included 147 newborns, they were assigned to interventions: 37 had the application of Prilia cream, 40 received 1ml of 30% glucose, 34 received breastfeeding and 36 newborns were assigned to a control group. The mean DAN score in the control group was 6.3 (± 2.68). The mean DAN scores for the 30% glucose group, breastfeeding group and Prilia cream group were 0.8 (± 0.94), 0.6 (± 0.92) and 4 (± 2.78) respectively. This demonstrated a statistically significant decrease in DAN score means compared to the control group ($P < 0.05$). Among the 3 intervention groups, a paired group comparison of mean DAN scores was analyzed and showed that the analgesic effect of 30% glucose was statistically equivalent to breastfeeding ($p=0.473 > 0.05$). However, there was a statistically significant difference between 30% glucose and Prilia cream, and between breastfeeding and Prilia cream ($P < 0.01$).

Conclusion: Neonatal pain is underestimated in our care units. Non-pharmacological modalities are effective in reducing neonatal pain and should be in the first line use of neonatal care.

OC129. NUTRITIONAL PROFILE OF OBESE WOMEN FOLLOWED FOR POLYCYSTIC OVARIAN SYNDROME

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Introduction : Polycystic ovary syndrome (PCOS) is a common hormonal condition among women of reproductive age, which is usually associated with obesity. Different Methods of nutritional care are proposed to improve the quality of life of these women. Our objective was to evaluate the nutritional profile of obese women followed for PCOS.

Methods: We conducted a prospective observational study at the obesity unit of the National Institute of Nutrition and Food Technology in Tunis. Recruitment of the study population lasted four months spanning from November 15, 2023 to March 15, 2024. We included

obese women who had reached puberty and were being monitored for PCOS.

Results: We collected 33 women whose average age was 29.84 ± 6.85 years. The age of discovery of PCOS varied between 14 and 39 years with an average of 23.41 ± 7.29 years. The number of measurements per year of the population varied between two and 12 measurements with an average of 9.03 ± 3.55 measurements. More than half of the population (56.3%) had an irregular menstrual cycle. The population studied had a total energy expenditure of 2643.27 ± 230.60 Kcal and an average caloric intake of 2770.22 ± 794.96 Kcal. Calcium and potassium intakes were deficient with respective means of 649.88 ± 226.41 mg/d and 3172.22 ± 828.17 mg/d. On the contrary, sodium and omega 6 intakes exceeded the limits with respective means of 5608.94 ± 1544.84 mg/d and $4.53 \pm 3.39\%$ of total energy intake.

Conclusion: Our study shows that obese PCOS women, despite their excessive caloric intake, suffer from multiple nutritional deficiencies.

OC130. FREQUENCY AND RISK FACTORS OF LATE-ONSET NEUTROPENIA IN VERY PRETERM INFANTS

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Introduction: Neutropenia, defined as a neutrophil count ≤ 1500 cells/mm³, is common in very preterm infants. It may have an early or late onset. We aimed to determine the incidence and risk factors for late onset neutropenia (LON) in very preterm infants.

Methods: This was a retrospective descriptive study over a five-year period (2018-2023). We included very preterm infants with a gestational age (GA) between 28 and 32 weeks, with a neutrophil count on day 1 and day 21 of life. Neutropenia is classified as early (before 21 days of age) and late (from 21 days of age).

Results: We included 114 patients. The mean GA was 30.1 ± 1.1 weeks and the mean birth weight was 1343 ± 293 g. Thirteen neonates were small for GA. Early neutropenia was observed in 36 cases (31.6%). LON was observed in 24 patients (21.1%) at a mean postnatal age of 40 ± 12 days (28-69 days). The nadir was 977 ± 314 cells/mm³. Nine patients had both early and late neutropenia. LON was associated with late-onset sepsis in eight cases. LON was observed in 44% of cases with intraventricular haemorrhage (IVH) compared to 17% without IVH ($p=0.024$). There was no association between LON and birth weight, GA, intrauterine growth retardation or early onset sepsis. Neutrophil count at 21 days of age was inversely associated with GA ($r=-0.196, p=0.037$). The mortality rate was 20% in cases of LON and 16.7% in the absence of LON (not significant). LON persisted at discharge in 16 cases.

Conclusion: Our population was characterised by a high frequency of LON, often not associated with late-onset sepsis, and the main risk factor was IVH.

OC131. MIDWIVES AND NEONATAL RESUSCITATION: THE IMPACT OF SIMULATION TRAINING ON KNOWLEDGE ENHANCEMENT

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Introduction: The neurological prognosis of newborns is directly linked to the quality of neonatal resuscitation when it is necessary. It is imperative that the midwife, as the first person in contact with the newborn, be sufficiently competent in this area. Aim: Assess the level of knowledge in neonatal resuscitation before and after a clinical simulation session.

Methods: A prospective, descriptive, monocentric study was carried out. All midwives practicing in the delivery room and involved in the care of newborns at birth were enrolled. Two questionnaires were administered to assess participants' knowledge before and after a simulation session in neonatal resuscitation.

Results: We enrolled 50 midwives who had an average of 16.5 years of professional experience. Drying and stimulation were routinely performed by the midwives. Mask ventilation and chest compression were only routinely practiced by 8% of them. The main factor negatively influencing management of newborns in the delivery room was stress. In the survey, 56% of the midwives had insufficient knowledge in neonatal resuscitation, while only 4% had good knowledge. The average pre-test score for all participants was 9.88, with a range from 2.76 to 15.75. The level of knowledge of midwives was not influenced by years of experience (0.17) or number of shifts (0.72). The post-test Results showed a significant improvement in knowledge ($p < 0,001$).

Conclusion: Mastery of neonatal resuscitation by midwives is imperative to ensure the adequate management of neonates. Gaps in theoretical knowledge highlight the need for ongoing and regular training.

OC132. NEONATAL OUTCOMES OF VERY PRETERM INFANTS SMALL FOR GESTATIONAL AGE IN A TUNISIAN NEONATAL INTENSIVE CARE UNIT

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Introduction: Very preterm birth is a major public health problem due to its increasing frequency and socio-economic cost. Hypotrophy is an additional factor in morbidity and mortality. We aimed to assess the impact of small for gestational age (SGA) status at birth on mortality and major neonatal morbidity in very preterm

infants.

Methods: This was a retrospective, descriptive, case-control study over an eight-year period (2016-2023). We included all very preterm infants between 28 and 32 weeks of gestation, SGA with birth weight (BW) below the 10th percentile (group1). The control group consisted of very preterm appropriate for gestational age (AGA) infants (BW between 10th and 90th percentile), matched for gestational age (GA) (group2). Severe neonatal morbidities were high-grade intraventricular haemorrhage, cavitory periventricular leukomalacia, severe necrotising enterocolitis (NEC), severe bronchopulmonary dysplasia (BPD) or severe retinopathy of prematurity.

Results: We included 224 very premature infants: 56 cases and 168 controls. Mean GA was 30.5 ± 0.9 weeks in group1 versus 30.5 ± 1.8 weeks in group2 (NS). Mean BW was 972 ± 154 g in group1 versus 1442 ± 192 g in group2 ($p < 0.001$). Severe neonatal morbidity was observed in 14.3% of cases versus 11.3% of controls (NS). The mortality rate was 39.3% in group1 versus 15.5% in group2 ($p < 0.001$). Multivariate analysis demonstrated that SGA status at birth in very premature infants was an independent factor associated with NEC (aOR=4.76,95%CI[1.34-16.94], $p=0.016$), BPD (aOR=2.60,95%CI[1.03-6.54], $p=0.042$), mortality (aOR=4.24,95%CI[1.73-10.42], $p=0.002$) and composite risk of severe morbidity/death (aOR=5.58,95%CI[2.27-13.72], $p < 0.001$).

Conclusion: Our study showed that SGA status in very preterm infants was a direct risk factor for mortality and the composite risk of major morbidity/death.

OC133. PERINATAL ASPHYXIA PROGNOSIS AND OUTCOMES NEONATOLOGY

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Introduction: Perinatal asphyxia is a critical condition that can lead to severe hypoxic ischemic organ damage in newborns followed by a fatal outcome or severe life long pathologies. The aim of this study was to analyze the complications of perinatal asphyxia in a cohort of neonates.

Methods: This was a retrospective, monocentric study of all newborns admitted to the neonatal between 2016 and 2022 by reviewing medical records and contacting parents. The diagnosis of perinatal asphyxia was based on umbilical artery blood pH Apgar scores and neonatal neurological status. The Sarnat classification was used to classify neonates according to the degree of encephalopathy.

Results: We included 35 newborns with diagnosis of perinatal asphyxia, 30% (N=15) were considered Sarnat I asphyxia 22% Sarnat II (N=11) and 18% Sarnat III (N=9). Short-term complications included biological abnormalities such as hemostasis disorders in 30% (N=15) electrolyte imbalances in 11% (N=4) cardiac dysfunction

in 20% (N=7) . psychomotor delay was observed in 22% (N=8).one case presenting poor sucking reflex requiring gastrostomy and one case where sucking reflex gradually improved. Long-term complications revealed pediatric psychiatric disorders particularly violent behavior and ADHD in 40% (N=14). Learning disabilities were reported in 15% (N=6). Neurosensory sequelae included two cases of hearing loss requiring hearing aids, strabismus and severe myopia observed in two cases , one case of epilepsy and two cases presenting spastic cerebral palsy .
Conclusion: Short- and long-term prognosis was associated with significant neurosensory morbidity, highlighting the importance of well-structured and organised multidisciplinary follow-up to optimise management of complications.

OC134. PRACTICES AND BARRIERS TO SKIN-TO-SKIN CONTACT IN A TUNISIAN MATERNITY DEPARTMENT

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Introduction: Early and prolonged skin-to-skin contact (SSC) between newborns and their mothers is highly recommended for its benefits in newborn adaptation and bonding. However, implementing SSC can be challenging. We aimed to evaluate the practice of SSC in maternity department and identify the difficulties encountered.

Methods: This was a prospective descriptive study conducted over a 3-month period (September-November 2023). It included term, eutrophic neonates who were well adapted to extrauterine life, without respiratory distress, whose mothers were haemodynamically, respiratory and neurologically stable and who accepted SSC.

Results: We included 249 mother-newborn pairs. The mothers were primiparous in 41% of cases. The newborns had a mean gestational age of 39.2±1 weeks (37-42 weeks) and a mean birth weight of 3303±349g (2450-4170g). Vaginal delivery was performed in 49.4% of cases. SSC was performed within the first hour of life in 28.5% of cases (n=71). The mean duration was 24±19 minutes (15-90minutes). This was followed by early breastfeeding in 51% of cases (n=36/71). The main barriers to SSC were maternal pain (n=94, 37.8%), maternal fatigue (n=68, 27.3%), prolonged stay in the postoperative recovery room (n=50, 20.1%), lack of available staff for monitoring (n=20, 8%) and low ambient temperature in the delivery room (n=17, 6.8%). SSC was less frequently performed in cases of cesarean delivery (16.7% vs 40.7%, p<0.001) and in cases of gestational diabetes (16.7% vs 33.1%, p=0.007).

Conclusion: Our study showed that the practice of SSC was inadequate in both frequency and duration. To improve this, we need better antenatal education and effective peri-partum pain management.

OC135. NEONATAL SEIZURES: EPIDEMIOLOGICAL,

ETIOLOGICAL AND PROGNOSTIC STUDY

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Introduction: Neonatal seizures represent a frequent neurological emergency requiring mastery of their clinical and etiological characteristics. This study aims to specify the epidemiological, etiological and evolutionary aspects of neonatal seizures.

Methods: This is a retrospective study conducted at the pediatrics and neonatology department of Mongi Slim Hospital in Tunisia, over a period of 66 months, from January 2017 to June 2022. All newborns with neonatal seizure were included.

Results: A total of 69 cases of neonatal seizures were recorded, yielding a prevalence of 5.2‰ live births. The sex ratio was 1.3. Prematurity was observed in 46% of cases. Among the patients, 29% had an Apgar score below 7 at 5 minutes. Subtle seizures were the most common type, occurring in 77% of cases. Seizures began within the first 24 hours in 23% of cases. Status epilepticus occurred in 12% of neonates. Electroencephalography was performed in 58% of newborns, with abnormalities detected in 25%. Brain magnetic resonance imaging, conducted in 51% of cases, revealed abnormalities in 56%. Anoxic-ischemic encephalopathy was the most frequent etiology, noted in 33% of cases. Anticonvulsants were administered in 87% of cases, with 58% showing resistance to the first bolus. The mortality rate was 33% and was significantly associated with seizure duration exceeding 15 minutes, birth weight below 1500 grams, anoxic-ischemic encephalopathy, and malformative causes. Psychomotor delay was noted in 47% of patients.

Conclusion: Despite advancements in perinatal care, the mortality and morbidity associated with neonatal seizures remain high. Preventive and therapeutic measures are essential to improve prognosis

OC136. NEONATAL BACTERIAL MENINGITIS: EPIDEMIOLOGY AND OUTCOMES

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Introduction: Bacterial neonatal meningitis (BNM) is a critical pathology that can be life-threatening, necessitating rapid diagnosis and appropriate treatment to limit sequelae. This study aims to describe the characteristics and outcomes of BNM.

Methods: We conducted a retrospective, descriptive study from 2020 to 2023, including infants ≤ 28 days old diagnosed with bacterial meningitis at the Pediatrics and Neonatology Department of Mongi Slim University

Hospital in Tunis.

Results: The study included 30 patients, representing an overall prevalence of 4.1‰. The sex ratio was 3.3. The caesarean section rate was 47%. The mean birth weight was 2900 g, and the median gestational age at birth was 39 weeks. There were seven premature infants. Late-onset (after 4 days of life) prevailed over early-onset meningitis (60% vs. 40%). Clinical signs were dominated by fever (73%), feeding refusal (48%), seizures (30%), and signs of shock (20%). Lumbar puncture was performed in all patients, 37% of whom were already on antibiotics. Cerebrospinal fluid culture was positive in 30% of cases. Group B streptococci (44%) and *Escherichia coli* (33%) were the most common infecting microorganisms, followed by *Klebsiella pneumoniae*. Combined antibiotic treatment was used in 67% of patients. Cranial ultrasound showed pathological findings in 7% of cases, including hydrocephalus (10%), ventriculitis, intraventricular hemorrhage, and anoxic-ischemic lesions. The median duration of hospitalization was 25 days. The mortality rate in our study was 3%.

Conclusion: This study highlights the severity of BNM, the diagnostic and treatment challenges due to its nonspecific clinical presentation.

OC137. NECROTIZING ENTEROCOLITIS IN NEONATES: EPIDEMIOLOGICAL AND EVOLUTIONARY PROFILE

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Introduction: Necrotizing enterocolitis (NEC) is a common and severe pathology in neonatology, characterized by high morbidity and mortality rates. The aim of the study was to investigate the epidemiological and clinical outcomes of NEC.

Methods: A retrospective, descriptive study was conducted from 2020 to 2023 at the Pediatrics and Neonatology Department of Mongi Slim University Hospital in Tunis. The study included all newborns who developed Bell stage IIa NEC or higher.

Results: A total of 29 newborns were included, representing an overall prevalence of 4‰. The mean gestational age was 31 weeks, and the mean birth weight was 1460g. Nine patients had intrauterine growth restriction. The sex ratio was 1.2. The mean age at NEC onset was 6.2 days. Clinical signs were predominantly abdominal bloating and gastric residual abnormalities. General symptoms mainly included hemodynamic instability and apnea. Laboratory findings showed elevated C-reactive protein (69%), thrombocytopenia (41%), leukopenia (35%), and disseminated intravascular coagulation (27%). Abdominal X-rays revealed pneumatosis in 65% of cases. Two cases were complicated by intestinal perforation, and one case of post-enterocolitis intestinal stricture was diagnosed and surgically treated. In our series, four newborns developed neurological complications (hydrocephalus and periventricular leukomalacia), and six developed

retinopathy. The average length of hospitalization was 40 days. The mortality rate was 21%, with a mean age of death of 55 days.

Conclusion: Despite advancements in neonatal care, necrotizing enterocolitis remains a significant challenge. Identifying associated risk factors is crucial for improving prevention, early diagnosis, and management strategies to enhance prognosis.

OC138. NEONATAL ACUTE BRONCHIOLITIS: CLINICAL INSIGHTS AND MANAGEMENT

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Introduction: Acute bronchiolitis is a lower airway viral infection. It is particularly severe in newborns due to their immature immune systems. This study aims to describe the clinical characteristics and progression of acute bronchiolitis in neonates.

Methods: This study was retrospective and descriptive, spanning one year in the Pediatric Department C of Bechir Hamza Children's Hospital. It included all newborns who presented with acute bronchiolitis.

Results: The study analyzed 60 cases of neonatal bronchiolitis, with an average patient age of 19 days and a sex ratio of 1.6. Among the cases, 13% had a prior history of hospitalization, and 18% had a family history of atopy. Passive smoking was reported in 57% of cases. Viral contagion was present in 83% of cases, and 28% were exclusively breastfed. The primary reasons for consultation were acute dyspnea (93%) and cough (68%). The Wang score averaged 5. Polypnea was seen in 52% of cases, and 83% showed signs of respiratory distress. Chest X-rays revealed ventilatory disorders in 16% of cases. The average hospitalization duration was 6 days, with 68% of favorable outcomes. Oxygen therapy via high-flow nasal cannula was used in 30% of cases. About 32% of newborns required intensive care, with 9 needing mechanical ventilation. The average stay in intensive care was 8 days, and 5% of the cases progressed to asthma.

Conclusion: Acute bronchiolitis is a common viral infection in infants and is increasingly prevalent in the neonatal period. Managing this condition in newborns is challenging, emphasizing the importance of prevention through hygienic and dietary measures.

OC139. ASSESSMENT OF MOTHERS' KNOWLEDGE ABOUT ACUTE BRONCHIOLITIS IN INFANTS

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Introduction: Bronchiolitis is responsible for a strong seasonal epidemic every year. Mothers play a vital role in dealing with the disease by intervening throughout the therapeutic and preventive process, this can only be achieved by acquiring sufficient knowledge. Aim: To assess mothers' knowledge of acute bronchiolitis in infants.

Methods: This is a descriptive study that was conducted with mothers of infants hospitalized for acute bronchiolitis. It was carried out over a period of 4 weeks using a questionnaire of 31 questions.

Results: According to the analysis of 50 questionnaires, 52% of mothers think that a healthy adult can transmit the disease and only 30% of them consider contaminated objects to be a means of transmission. When signs of bronchiolitis appear, 40% of our population chose to consult a doctor quickly, but around a quarter (22% and 38%) who are close to the cultural and environmental level, have tried their own ways to relieve their babies by making misguided attempts (the use of olive oil, vinegar water...). Nasal clearance was the most frequently mentioned management measure by mothers (98%). Hygiene measures and barrier gestures have been well mentioned by our population, but on the other hand 48% of mothers do not know the importance of exclusive breastfeeding and 70% of them avoid ventilating the place in cold weather.

Conclusion: Better training and awareness-raising among mothers and/or parents on the prevention and management of acute infant bronchiolitis before any epidemic period is essential in order to reduce the incidence of the disease.

OC140. WHOOPING COUGH AND ITS PREVENTION IN CHILDREN: IMPACT OF AN EDUCATION SESSION IN IMPROVING PARENTS' KNOWLEDGE

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Introduction: Whooping cough is a respiratory infectious disease based on clinical and microbiological diagnosis. It's caused by a bacteria called Bordetella Pertussis. Primary prevention of the disease is mainly based on vaccination. Our aim was to describe parents' knowledge of whooping cough and study the impact of an education session on improving parents' knowledge.

Methods: Descriptive study in the PMI Mellassine center over three months, from January 25 to April 4, 2024. We questioned 100 parents to assess their knowledge about whooping cough.

Results: The average age of the parents interviewed was 34.6 years. Only 5% of parents had in-depth knowledge of whooping cough, while 14% were completely unaware of this disease. For 78% of parents, whooping cough is a very contagious acute respiratory disease and for 63% of them, infants aged less than 6 months were the most

exposed to complications. Cough, fever and dyspnea were known to be among the symptoms of whooping cough by 60% of parents. A third knew that the pertussis vaccine existed in the national vaccination schedule. Sixty-five recommended intensifying the broadcasting of television spots and organizing educational sessions. The analytical study showed a clear improvement in parents' knowledge after the education session. There was complete support for the generalization of vaccination to children of school age as well as pregnant women.

Conclusion: Our study highlighted many inadequacies in parents' knowledge about whooping cough, which could be improved by education sessions. Health professionals have a central role in improving this knowledge.

OC141. FATAL TRADITIONAL THERAPY: CADE OIL POISONING AS AN EXAMPLE

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Introduction: Traditional medicine is still a common practice in our population. Healers, charlatans and even parents tend to use some long-established substances even though they may be known for their toxicity or illegality. Cade oil is used in this context to treat children, resulting in many complications that may lead to death.

Methods: In this paper, we propose to study the medico-legal and legal aspects of Cade oil therapy through three cases of child deaths resulting from this practice.

Results: We collected three cases of Cade oil poisoning. All the children had a low socioeconomic status and were from rural areas. The parents' belief in the efficacy of these traditional Methods, due to the perceived failure of modern treatments, was the reason for resorting to these practices in all three cases. The average age of the children was 14 months and 8 days [ranging from 1 month to 4 years]. The sex ratio was 2:1. The average time for symptoms of poisoning to appear was approximately 14 hours. The main reason for seeking medical consultation was digestive symptoms in most cases. A medico-legal autopsy was performed in only one case. Legislative measures were taken for all victims, including a report to the child protection delegate.

Conclusion: Cade oil poisoning in children, as a result of non-conventional treatments, constitutes an assault on their physical integrity. Prevention plays a crucial role in addressing this phenomenon by raising awareness among both parents and healthcare workers to prevent fatalities.

OC142. ATYPICAL PRESENTATIONS OF VIRAL HEPATITIS A IN CHILDREN: CLINICAL CHARACTERISTICS AND OUTCOMES

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Introduction: Viral hepatitis A (VHA) is typically asymptomatic in children, with more than 90% of symptomatic cases presenting classically and resolving rapidly. However, atypical and severe forms are rare. This study aims to describe the clinical characteristics and outcomes of these atypical and severe presentations in pediatric patients.

Methods: We conducted a retrospective study at the Children's Hospital of Tunis (June 1995 - December 2022) including patients with atypical VHA.

Results: Of the 40 patients, 31 presented with acute liver failure, and 12 of these cases were complicated by hepatic encephalopathy. The mortality rate was 19%. A prothrombin time of less than 21% and a bilirubin level above 300 $\mu\text{mol/L}$ at admission were associated with a poor prognosis. VHA revealed autoimmune hepatitis in two patients aged 6 and 7 years; diagnosis was suspected due to an unusually prolonged outcome and increased gammaglobulin levels, and confirmed via histological data. The outcome was favorable with immunosuppressive treatment. In three patients, acalculous cholecystitis revealed VHA, which responded well to medical treatment. Another three patients developed prolonged cholestatic VHA with significant cytolysis and near-normal gamma-glutamyl transferase levels; outcomes were favorable, and VHA was deemed the sole cause of cholestasis. A 10-year-old girl presented with biphasic cholestatic jaundice, hepatomegaly, and positive Immunoglobulin M serology.

Conclusion: In endemic areas, VHA should be considered in patients with atypical symptoms such as prolonged cholestasis, biphasic cholestasis, acalculous cholecystitis, and autoimmune hepatitis. Autoimmune hepatitis should be suspected in VHA patients with prolonged cholestasis or elevated gammaglobulins.

OC143. EFFECTIVENESS OF AUDIOVISUAL VERSUS TRADITIONAL EDUCATION IN ENHANCING MOTHERS' KNOWLEDGE OF INFANT ACUTE DIARRHEA

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Introduction: Acute diarrhea (AD) is a frequent issue in pediatrics, and managing it can be costly. Therapeutic education focused on prevention is crucial. This study aimed to evaluate and compare the effectiveness of using an educational video versus traditional Methods in educating mothers about infant AD.

Methods: This descriptive, analytical, and cross-sectional study involved mothers of infants under two years old hospitalized at Bechir Hamza Children's Hospital. We assessed the mothers' knowledge of acute diarrhea

before and after a traditional education session for one group and after viewing an educational video for the second group.

Results: We included 80 mothers, divided into two groups of 40 each. There was no significant difference in pre-test knowledge scores between the two Methods (9.68/20 for the traditional method versus 10.07/20 for the audiovisual method; $p>0.05$), nor in sociodemographic data ($p>0.05$). Both Methods showed significant improvements in knowledge scores about infant acute diarrhea. For the traditional method (Group 1), scores improved from 9.68/20 before to 13.13/20 after education ($p\leq 0.05$). For the educational video (Group 2), scores improved from 10.07/20 before to 17.42/20 after viewing ($p\leq 0.05$). Comparing post-test Results, the educational video was more effective than the traditional method, with scores of 17.42/20 versus 13.13/20 ($p\leq 0.05$).

Conclusion: Our study demonstrated a positive impact of using an educational video on mothers' knowledge about infant AD.

OC144. MEGALOBlastic ANEMIA IN CHILDREN: ETIOLOGIES AND CLINICAL OUTCOMES

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Introduction: Megaloblastic anemia (MA) is a rare condition in children, with diverse etiologies that can lead to misdiagnosis and delay treatment. This study aimed to describe the epidemiological and etiological characteristics of children treated for MA at the Tunis Children's Hospital.

Methods: This is a retrospective study over a period of 25 years of all case of MA in children in the children hospital of Tunis. The diagnosis of MA was confirmed by myelogram in all patients.

Results: We analyzed 29 cases of MA, with an incidence of 1.2 cases per year and an equal sex distribution. Sixty percent of the children were aged between 3 months and 2 years. A third of the patients had a consultation time of 15 to 30 days. Clinical examinations revealed hypotrophy in 13% of cases, hepatosplenomegaly in 6%, neurological or neurosensory damage in 23%, and cardiac damage in 10% of children. MA was associated with thrombocytopenia in 65% of cases and leukopenia in 24%. Additionally, 20% of the children exhibited pancytopenia. The primary etiologies included thiamine deficiency, Immerslund syndrome (20%), nutritional deficiency (13%), and Biermer's anemia (13%). One

patient presented with MA as a manifestation of visceral leishmaniasis. All patients responded favorably to vitamin B12 therapy, adapted to each specific etiology.

Conclusion: Megaloblastic anemia in children is rare, predominantly caused by hereditary conditions and nutritional deficiencies, primarily involving vitamin B12. The association with visceral leishmaniasis appears to be a unique finding in our region that has not been widely reported in the literature.

OC145. IDIOPATHIC JUVENILE ARTHRITIS-ASSOCIATED UVEITIS: PEDIATRIC EXPERIENCE IN TUNISIA

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Introduction: Juvenile idiopathic arthritis (JIA) is the most common rheumatic disease in children, with uveitis being its most frequent extra-ocular manifestation. Prevalence of uveitis in JIA ranges from 11.6% to 30%, highlighting need for systematic screening of all JIA-affected children, even if asymptomatic. This study aims to describe the epidemiological, clinical, and therapeutic aspects of uveitis associated with JIA.

Methods: A monocentric observational retrospective study was conducted on children with uveitis referred to the pediatric-emergency-consultations ward at the Children's Hospital of Tunis Bechir Hamza over 24 years (January 2000, to December 2023).

Results: Among 55 children with uveitis, 10 cases (18.2%) were associated with JIA. Nine were oligo-articular, and one was unclassified JIA. Sex ratio was 0.66. Average age was 5.1 years. Sixty percent were already under JIA follow-up when uveitis was diagnosed via systematic ophthalmological exams. The rest had ocular involvement as the initial symptom. Bilateral involvement was observed in 80% of cases, with anterior uveitis being the most common form (70%), followed by panuveitis (20%). Two children had granulomatous uveitis. At diagnosis, 60% had developed ocular complications. Antinuclear antibodies were positive in 80%. All children received antimetabolite treatment, with oral steroids in 60% of cases. Biotherapy was required in 30% due to inadequate response to first-line therapy. Preschool age and antinuclear antibody positivity were significant risk factors for JIA-associated uveitis.

Conclusion: Diagnosing uveitis associated with JIA is challenging due to its often asymptomatic nature. Systematic and regular screening of JIA-affected children is essential, as ocular manifestations can progress independently of joint disease.

OC146. THERAPEUTIC PROFILE OF PEDIATRIC UVEITIS IN TUNISIA

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Introduction: Pediatric uveitis is rare, constituting 5-10% of all uveitis cases. This sight-threatening condition demands thorough etiological investigation and early, etiology-specific management. This study aims to describe the therapeutic profile of pediatric uveitis in a reference pediatric department in Tunisia.

Methods: A retrospective observational monocentric descriptive study was conducted on records of children with uveitis over 24 years (January 1, 2000, to December 31, 2023) at the Bechir Hamza Children's Hospital in Tunis.

Results: Fifty-five children were followed for uveitis. Idiopathic uveitis was most frequent (61.8%), followed by non-infectious uveitis. Corticosteroids were the first-line treatment in 98.1% of cases. Topical corticosteroid therapy was used in 83.6% of patients, alone in 16.3% with isolated anterior uveitis. Oral corticosteroid therapy was given to 72.7% of patients, with an average dose of 1.7 mg/kg/day for 3.7 months. Immunosuppressive therapy was indicated in 67.2% of patients. Methotrexate, used in 43.6% of cases, was administered at an average dose of 16.25 mg/m²/week for 29.55 months. Azathioprine was used in 27.2% of cases at an average dose of 2.14 mg/kg/day for 38.4 months. Four patients (7.2%) received biotherapy with adalimumab. Non-medicinal treatments such as surgery, periocular corticosteroid injections, or laser photocoagulation were required in seven patients.

Conclusion: The complications of uveitis can be severe; however, adaptive therapeutic strategies involving active collaboration between ophthalmologists and pediatricians often help prevent or mitigate these complications.

OC147. ORAL FOOD CHALLENGE IN CHILDREN: A TUNISIAN EXPERIENCE

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Introduction: Food allergy (FA) has seen a consistent rise in recent years. Oral food challenge (OFC) is the standard for the management of FA. Aim: Describe clinical, biological and Results of OFCs in children suspected of FA.

Methods: This was a retrospective descriptive study of children with suspicion of FA and having an OFC program, conducted in the Infant Medicine B department of the Béchir Hamza's Hospital between January 1st. 2019 and August31, 2023.

Results: Twenty-eight cases were collected and 37 OFCs were performed. Cow's milk (CM) was the most suspected food (N=20). Clinical manifestations were essentially cutaneous (79%) and digestive signs (50%). Five children had a primary skin prick test (18%) (positive in 4/5 cases), and 12/28 had a primary serum food-

specific IgE test for CM in 11 cases (positive in 9/11 cases) and peanut in one case. The median age at the first OFC was 40 months (6 months – 14.5 years). In 20/37 cases, it was a reIntroduction of OFC concerning the CM. It was successful in 17/20 cases. At the end of the study, 10/20 had acquired tolerance to cow's milk proteins at a mean age of 18 months (12 to 26 months) and nine were on oral CM immunotherapy. In 17/37 cases (29%) it was an OFC to diagnose FA. Sixteen OFCs eliminated FA. An apple OFC identified a pollen-food allergy syndrome related to PR10.

Conclusion: The development of OFC protocols in pediatric departments is essential to diagnose and manage FA.

OC148. ADVERSE CHILDHOOD EXPERIENCES AMONG TUNISIAN ADOLESCENTS

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Introduction: Adverse Childhood Experiences (ACEs) are recognized as major risk factors affecting physical and mental health in the short, medium, and long term. This study aims to investigate the prevalence of these adverse experiences among Tunisian adolescents.

Methods: We conducted a survey among adolescents attending middle and high schools in the governorate of Monastir during the 2023/2024 school year. Written consent, a demographic information sheet, and the Adverse Childhood Experiences International Questionnaire (ACE-IQ) were completed by the participants.

Results: Our study included 1005 adolescents with a mean age of 14.62 years and a sex ratio of 0.73. We found that 92.2% of adolescents had experienced at least one adverse event during childhood, distributed as follows: one event in 7% of cases (n=70), two to three adverse events in 19.1% (n=192), and four or more adverse events in 66.2% of cases (n=665). These events were categorized into intrafamilial ACEs (70.1%), with the most frequently reported being emotional abuse (62.7%), followed by familial dysfunction (52.7%) and then physical abuse (49.6%), and extrafamilial ACEs (78.7%), whose most commonly mentioned being community violence (67.4%) followed by peer violence (66.7%).

Conclusion: Our study revealed a significant prevalence of Adverse Childhood Experiences among adolescents. This highlights the urgent need to develop and implement targeted prevention and intervention programs.

OC149. BODY IMAGE IN ADOLESCENTS VICTIMIZED BY BULLYING

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Introduction: Bullying is a global concern for youth populations due to its negative consequences on personal, familial, and social levels. The aim of this study is to investigate the specificity of body image among adolescents who are victims of bullying.

Methods: This cross-sectional descriptive and analytical study is based on a survey of adolescents attending middle and high schools in the governorate of Monastir during the 2023/2024 school year. Participants completed written consent forms, a demographic information sheet, the Adolescent Peer Relations Instrument (APRI), the Second Revision of the Revised Cyberbullying Inventory (RCBI II), and the Body Esteem Scale for Adolescents and Adults (BESAA).

Results: Our study included 1005 adolescents with a mean age of 14.62 years and a sex ratio of 0.73. The median score on the APRI scale was 27 [22;36]. The prevalence of school bullying victimization was 92.1%, with 59.6% experiencing victimization once a month or more. Adolescents experienced verbal bullying in 88% of cases and were exposed to all three types of bullying in 68.8%. Cybervictimization was reported by 39.7% of the participants. We found that 11.9% of adolescents had poor body esteem. There was a significant correlation between exposure to school bullying and both the total scores and sub-scores on the BESAA scale ($p<0.001$), as well as a significant link between cyberbullying and body esteem ($p<0.001$).

Conclusion: Our Results highlight the need to develop appropriate prevention and intervention strategies in order to improve body esteem and adolescent well-being.

OC150. REASONS FOR ENGAGING IN SELF-HARMING BEHAVIOR IN ADOLESCENCE

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Introduction: Adolescence is a crucial period of transition characterized by significant physical, emotional and psychosocial changes. It is a particularly vulnerable period for the onset of mental disorders, which may promote the emergence of self-harm. The aim of our study was to investigate the functions underlying self-harm in a clinical population of adolescents.

Methods: Cross-sectional study conducted at the Child Psychiatry Department of Mongi Slim Hospital, involving 202 adolescents aged 12-18 years. Each participant received a consent form and the Tunisian Arabic version of the Inventory of Statements About Self-Injury (ISAS). The second part of this questionnaire is designed to assess 13 functions of self-harm.

Results: In our study, 65.8% of the adolescents (n=133) reported having self-harmed at least once in their life. The mean age was 14.5 years and the sex ratio was 0.49. Adolescents scored high on the interpersonal factor in 19.5% of cases, with a mean score of 16.75. This factor includes autonomy (36.8%, n=49), interpersonal

boundaries (30.8%, n=41), sensation seeking (21.8%, n=29), peer bonding (21.1%, n=28), and self-care (18.8%, n=25). The intrapersonal factor score was high in 33.1% of adolescents (n=44), with a mean score of 12.62. The intrapersonal functions included affect regulation (48.9%, n=65), self-punishment (35.5%, n=47), marking distress (30.8%, n=41) and anti-suicide (28.5%, n=38).

Conclusion: Understanding self-harming behaviors in adolescents allows for personalized therapeutic approaches, offering healthier alternatives. This is crucial for improving mental health outcomes.

OC151. PROFILE OF EMERGENCY CONSULTATIONS IN CHILD AND ADOLESCENT PSYCHIATRY: A RETROSPECTIVE STUDY AT MONGI SLIM HOSPITAL

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Introduction: To describe the socio-demographic, clinical and therapeutic characteristics of children and adolescents seeking emergency consultation at the Child and Adolescent Psychiatry Department of Mongi Slim Hospital.

Methods: A retrospective descriptive study of the records of children and adolescents aged between 10 and 18 years who presented for emergency consultation at the Child and Adolescent Psychiatry Department of Mongi Slim Hospital, between January and December 2023. Data were collected using a pre-designed information sheet.

Results: Our study included 190 patients. The mean age was 14 years. The sex ratio was 0.76. The most common reasons for consultation were suicidal behavior (40%), conduct disorder (21%) and depressive symptoms (14%). About one third of 32% of patients (32%) was seen on the same day. In half of the cases it was a real psychiatric emergency. Passive suicidal thoughts were reported by 19.5% of the children, while suicidal acts were observed in 8.5% of the patients. The most commonly diagnosed psychiatric disorders were adjustment disorders (17.9%) and depressive disorders (21%). Psychotherapeutic interventions were initiated in all patients. In 8.9% of cases a report was made to the child protection officer and in 26.8% of cases an intervention was made at school. No medication was prescribed in 77.3% of cases. The outcome was complete remission of symptoms in 23% of cases.

Conclusion: In order to improve children's access to psychiatric care, it is necessary to adapt services to the specific needs of those who are seeking emergency consultation.

OC152. EVALUATION OF QUALITY OF LIFE IN INDIVIDUALS WITH TRISOMY 21 AND THEIR PARENTS

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Introduction: Trisomy 21 is the most common genetic cause of intellectual disability. Few studies have been carried out to evaluate the quality of life (QOL) in these individuals. The aim of this study was to assess the quality of life of these children and their parents and to identify the factors that may influence it.

Methods: A transversal, descriptive study was conducted between June and October 2020, including 100 patients. We have developed two questionnaires in Tunisian dialect to evaluate prospectively the QOL of our patients and their families.

Results: The QOL of our patients was relatively good, the average global score was 12.8 ± 5.4 ; the "health" dimension was rated the best and the "leisure" dimension was the least rated. The patient-related factors that were statistically associated with poor QOL were male sex, young age, lack of speech therapy, ophthalmological and renal involvement. Factors associated with parents were their mental health, financial situation and work life. The parental QOL was poor, the average score was -4 ± 3.1 . Mother's QOL were more negatively impacted than fathers. Psychiatric involvement in the child had a negative impact on parental QOL. Best scores were obtained in "parental projection in the future" and "impact on the relationship with neighbors and family". The "leisure time" and "parental physical health" had lowest scores.

Conclusion: We have noticed that people with Down syndrome had a satisfactory QOL, but parent's QOL was impaired. We need to include more patients to verify our Results.

OC153. POLYMORPHISMS OF PRE-MIR-146A G/C (RS2910164) AND PRE-MIR-499 T/C (RS3746444) IN SYSTEMIC LUPUS ERYTHEMATOSUS IN A TUNISIAN POPULATION

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Introduction: Systemic lupus erythematosus is a chronic multifactorial autoimmune disease belonging to the connective group and affecting women in reproductive age. It is characterized by anti-nuclear antibodies production which are directed against native DNA. Several studies showed the involvement of microRNAs (short, non-coding RNAs) in lupus pathophysiology. miR-146a and miR-499 were described associated with autoimmune diseases with some contradictions. The purpose of our study was to see whether miR-146a and miR-499

polymorphisms rs2910164 and rs3746444 respectively are associated with systemic lupus erythematosus.

Methods: 100 controls and 80 patients were included in our study. The genotypes of the two polymorphisms studied were obtained after a PCR-RFLP method. The statistical analyses was done by using SPSS program.

Results: Our study showed that there is no significant difference in allelic and genotypic frequencies between patients and controls for polymorphism rs2910164 miR-146a. On the other hand, polymorphism rs3746444 miR-146a499 is associated with the risk of having the SLE as per the Co-dominant model (OR=1,858[1,069-3,229]; p=0,028) and the Dominant model (OR=2,463[1,303-4,657]; p=0,006). The mutated allele C is significantly increased in patients compared to controls, with a OR=1,848[1,074-3,18]; p=0,027.

Conclusion: MiR-499 polymorphism rs3746444 appears to be a risk factor for predisposition to SLE in our population.

OC154. FUNCTIONAL POLYMORPHISMS IN PRE-MIR146A (RS2910164 C/G), AND PRE-MIR196A2 (RS11614913 C/T) IN THE GOUGEROT-SJÖGREN SYNDROME IN THE TUNISIAN POPULATION

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Introduction: Gougerot-Sjögren syndrome (GSS) is a systemic autoimmune disorder characterized by inflammation of the exocrine glands, especially the salivary and lacrimal glands, which Results in dry mouth and dry eyes. Exposure to environmental factors combined with a genetically predisposed background appears to be the primary cause of the disease. Recently, microRNAs have garnered considerable attention in the study of Sjögren's syndrome pathogenesis due to their critical role in regulating the immune response. MicroRNAs, particularly miR-146a, and miR-196a2, are notably involved in several autoimmune diseases. Aim: The study aimed to investigate the association of pre-miR146a (rs2910164 C/G) and pre-miR196a2 (rs11614913 C/T) polymorphisms with Gougerot-Sjögren syndrome in the Tunisian population.

Methods: The SNPs were genotyped in 120 patients with GSS and 130 healthy controls using RFLP-PCR method, and the data analysis was performed using the SPSS program.

Results: There were significant differences in the pre-miR146a (rs2910164 C/G) genotypes between GSS patients and healthy controls. The GG genotype was significantly more frequent in GSS patients compared to controls (0.49 vs. 0.28; p = 0.002). However, no significant difference was observed between the two groups regarding the CT+TT genotypes in the pre-miR196a2 (rs11614913 C/T) polymorphism (0.38 vs. 0.48; p = 0.052).

Conclusion: The rs2910164 C/G polymorphism of the pre-miR-146a gene was associated with Gougerot-Sjögren syndrome in the study population and appears to be a risk factor for susceptibility to the disease in our population (OR= 1.905 [1.201-3.021]; p=0.006).

OC155. FOK1 AND BSM1 POLYMORPHISMS OF THE VITAMIN D RECEPTOR GENE IN SCLERODERMA IN A TUNISIAN POPULATION

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Introduction: Systemic scleroderma (SSc) is a complex, rare autoimmune disease. Its origins and causes remain unknown. The vitamin D receptor (VDR) is a candidate gene for susceptibility to autoimmune diseases. The relationship between autoimmune diseases and polymorphisms of the VDR gene has already been evaluated, but the Results were contradictory. This study aims to assess whether FokI (rs2228570) and BsmI (rs1544410) polymorphisms of the VDR gene were associated with systemic sclerosis in a Tunisian population.

Methods: Our study included 68 SSc patients and 190 healthy controls. The genotyping of the two polymorphisms, FokI and BsmI, of the VDR gene was carried out using the PCR-RFLP method, and the data analysis was performed using the SPSS.

Results: Significant differences were observed between SSc patients and controls in the genotypes of both FokI and BsmI polymorphisms. The ff genotype and the f allele of the FokI polymorphism were significantly more prevalent in the control group than in the SSc group (0.14 vs. 0.06; p<0.001) and (0.42 vs. 0.27; p<0.001), respectively. Conversely, for the BsmI polymorphism, the bb genotype and the b allele were significantly more common in the SSc group compared to the control group (0.29 vs. 0.12; p=0.003) and (0.49 vs. 0.36; p=0.008), respectively.

Conclusion: The f allele of the FokI polymorphism appears to play a protective role against systemic sclerosis (OR=0.45 ; IC 95% [0.31-0.65] ; p<0.001) ; while, the b allele of the BsmI polymorphism seems to have an aggravating effect (OR=1.74 ; IC 95% [1.17-1.59] ; p=0.008).

OC156. CONGENITAL HEART DISEASES ASSOCIATED WITH DOWN SYNDROME

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Introduction: Down syndrome (DS) is the most common chromosomal abnormality associated with various birth defects. Congenital heart diseases (CHD) are a major cause of morbidity and mortality in children with DS. The aim of the study was to precise the clinical characteristics of CHDs in children with DS.

Methods: A retrospective study including children diagnosed with DS in the Pediatric Department of Habib Bougatfa Hospital from January 2019 to December 2023. All patients underwent at least one echocardiography examination.

Results: We collected 97 cases of DS during the study period. CHD were present in 48 cases (50%). The sex-ratio was 1.01. Median age of CHD diagnosis was 3.6 months. Antenatal diagnosis of CHD was made in 8.3%. Neonatal respiratory distress was observed in 43.7% newborns. Cyanosis was present in 25% of cases, cardiac murmur in 54.1% and heart failure was observed in 12.5 % of cases. CHD were diagnosed in routine screening in 23% of cases. The most common CHD was atrial septal defect (ASD) found in 25.3% patients, followed by patent ductus arteriosus (PDA) in 16.2% and ventricular septal defect (VSD) in 14.5%. Atrioventricular septal defect occurred in 8.1% patients. It was associated with aortic coarctation in 2.7%. ASD occurred in association with VSD in 10.2% of patients and with PDA in 16.2%. Valvular abnormalities were diagnosed in 5.4% newborns. Mean age of follow up was 3.2 years. The overall mortality rate was 8.5%.

Conclusion: The high prevalence of CHD among patients with DS justifies early screening and systematic examination to decrease morbidity and mortality.

OC157. DIAGNOSTIC PERFORMANCE OF MAF AND LHD IN THE SCREENING FOR BETA-THALASSEMIA TRAIT

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Introduction: The distinction of Beta-Thalassemia trait (TT) from iron deficiency is important for clinical decision-making. Our objective was to evaluate the diagnostic performance of Low hemoglobin density (LHD) and microcytic anemia factor (MAF) in TT detection.

Methods: This is a cross-sectional study involving 60 control subjects (G0) and 22 patients with TT (G1). LHD and MAF are calculated by the Beckmann Coulter DXH600 automate according to the following formulas : $MAF = (VGM * Hb) / 100$ $LHD\% = 100 \times \sqrt{1 - (1 / (1 + e^{1.8(30 - CCMH)}))}$. The performance of these two parameters was analyzed by ROC curve analysis specifying the area under the curve (AUC), sensitivity (Se), specificity (Sp), positive predictive value (PPV) and negative predictive value (NPV).

Results: The mean of MAF in G0 and G1 were 12.9 ± 2.3 and 6.4 ± 1.4 ; ($p < 0.001$) respectively. For MAF threshold value ≤ 9.85 , the diagnosis of TT could be eliminated

in 100% of cases (Se=100% ; NPV=100%)(Table 1). The mean of LHD in G0 and G1 were 5.2 ± 2.7 and 35.1 ± 27.6 ($p < 0.001$) respectively. The LHD performance is shown in table 1. For a threshold value of 5.11, TT diagnosis could be eliminated (Se=100%, NPV=100%). For a threshold value of 16.3, TT diagnosis could be confirmed (Sp=100%, PPV=100%)(Table1).

Conclusion: The use of LHD and MAF allows for early detection of TT without the need for additional sampling. Thresholds need to be refined with larger cohorts.

OC158. KNOWLEDGE OF TRANSFUSION-RESPONSIBLE PERSONNEL ABOUT ULTIMATE BEDSIDE CONTROL

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Introduction: The bedside test (BST) is crucial for preventing ABO incompatible transfusion incidents. This study aimed to evaluate BST knowledge and practices and assess the impact of training on implementing the Serafol ABO card.

Methods: An observational study was conducted from October 2022 to January 2023 at MTM hospital in Nabeul, targeting transfusion-qualified staff. The study comprised three stages: an initial knowledge assessment using a questionnaire, a training session on BST and the new Serafol technique, and a post-training assessment with the same questionnaire, including an evaluation of the new technique

Results: Ninety-three participants (46 doctors and 47 paramedics), with an average age of 36 and a median of 6 years of service, were included. Among them, 18% transfused frequently, and 31% had prior training. Incorrect serum method use was reported by 46%, and only 7.5% performed all pre-transfusion checks. Post-training, the percentage of participants scoring $\geq 50/100$ increased from 43% to 90% ($p = 0.000$). Correct Serafol card interpretation was achieved by 86% in isogroup and 81% in non-isogroup situations, though 20.5% would have transfused an incompatible bag. A significant difference in interpreting compatibility between doctors and paramedics was observed ($p = 0.03$). The overall mean interpretation score was 7.7/9, with a correct compatibility percentage of 77%. No significant association was found between correct responses and professional profile parameters.

Conclusion: This study reveals significant BST knowledge and practice gaps that improved after training and Serafol ABO implementation. Enhancing transfusion safety requires strengthening continuous medical education and monitoring the new procedure's application

OC159. DEVELOPMENT AND PRELIMINARY VALIDATION OF AN EDUCATIONAL TOOL ON

MYASTHENIA GRAVIS

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Introduction: The medical information provided by the patient information leaflet (PIL) could improve patient health care. Since there is no educational tool on myasthenia gravis in Tunisia, we aimed to design one adapted to the needs of the Tunisian population and to carry out a preliminary validation of this PIL.

Methods: The PIL has been developed following HAS recommendations. The development process included: selection of the topic and objectives, a literature review on the subject, definition of the sections, an initial pre-test submitted to health care professionals (two pharmacists and two doctors), and finally an assessment by patients of the readability, appeal, and comprehension of the brochure among 12 patients through a questionnaire of 18 semi-directive questions.

Results: After designing the PIL and having it validated, corrections were made. Regarding the patient assessment, all patients were satisfied with the readability and presentation of the brochure, including the illustrations. Additionally, both the comprehension and appeal of the PIL were equally appreciated by all the patients surveyed. Furthermore, patients stated that the brochure provided them with useful information about the pathophysiology of the disease (25%) and the medications contraindicated for these patients (25%). Regarding the information to add in the PIL, 20% of the patients suggested adding a new section on "myasthenia and pregnancy," while 30% suggested including information on innovative therapies.

Conclusion: This preliminary evaluation helped us to improve our PIL, ultimately enhancing the quality of life for myasthenic patients. Further assessment of the impact of PILs on doctor-patient communication should be conducted.

OC160. ENHANCING THE CULTURE OF ADVERSE EVENT REPORTING

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Introduction: Declaring adverse events (AE) is important to maintain and improve the quality and safety of patient care. A reporting form for AE allows the identification and analysis of common adverse events. Our objective is to implement a standardized protocol for AE reporting and

to enhance the culture of reporting AE among healthcare professionals.

Methods: A protocol for reporting AE and a reporting form, inspired by the HAS (Haute autorité de santé) guidelines, were developed and validated by the Patient Safety Committee and the Quality Cell of our institution. A training program was then conducted for all healthcare professionals, which included a satisfaction survey and pre- and post-tests to evaluate participants' knowledge. Data collection was analyzed using Excel.

Results: Forty healthcare professionals participated in our training session (75% paramedical, 80% were women). According to the pre-test, the knowledge mean score was 3.4±2(out of 10). 49% of the participants had moderate knowledge, and only 5.13% displayed good knowledge. After the training session, Results showed that the knowledge mean score increased to 6.4±1.6 with 35.9% of participants having moderate knowledge and 56.4% good knowledge. Furthermore, the satisfaction survey showed that 70% were extremely satisfied with the program and 62% of participants felt the training fulfilled their expectations. One month after the training, the Quality Cell received five adverse event reports.

Conclusion: The implementation of a standardized protocol, combined with a training program, significantly improved the reporting culture among healthcare professionals. This initiative enhanced both patient safety and care quality in our institution

OC161. ARTIFICIAL INTELLIGENCE STRUGGLES TO PASS NEUROPHARMACOLOGY MEDICAL EXAM

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Introduction: With the growing reliance of students on large language models (LLMs) as an educational tool in medicine, we believe it is essential to evaluate the accuracy and productivity of each LLM model when used in the medical field. In this study, we aimed to compare the performance of four LLMs ChatGPT, Perplexity, Gemini and Copilot's responses to pharmacology questions from the neurology exam for third-year medical students.

Methods: We utilized Chat GPT-3.5, Perplexity, Gemini and Copilot to address pharmacology questions from the neurology exam for third-year medical students. These questions were in a multiple-choice format. All LLMs were tasked with selecting one or more correct answers for each question. The validity of the chosen questions was confirmed through docimology verification. Reproducibility was evaluated by retesting three questions on a different day, and precision was assessed by modifying a question statement to have a single, specific answer.

Results: A total of eight questions were analyzed. Only ChatGPT passed the exam with a poor score of 10 out of

20. All LLMs failed the precision and reproducibility tests as they did not regenerate the same answers over time. See Table 1.

Conclusion: Our findings suggest that ChatGPT could be more performant than perplexity, Gemini or Copilot in answering medical questions. However, medical students and healthcare providers need to ensure the accuracy of medical information generated by LLMs.

OC162. PROTHESIS OF THE LOWER LIMB AMPUTEE: WHAT PROBLEMS ARE ENCOUNTERED?

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Introduction: Several factors can limit the prescription and use of lower limb prostheses, potentially worsening patients' disabilities. This study aims to identify these limitations.

Methods: We conducted a retrospective descriptive study from 1990 to 2023 on patients in the PRM department for lower limb amputations. Data was collected from patient files using a literature-based form, including socio-demographic and clinical information about lower limb amputees (LLA), as well as the characteristics, history, and management of their amputations.

Results: The study involved 59 patients, predominantly male (71.8%), with an average age of 58.96 ± 18.52 . Amputations were trans-tibial in 69% of cases. Causes included diabetic neuropathy (54.9%), post-traumatic neuropathy (22.5%), and peripheral artery disease (16.9%). Fourteen percent of patients had an average socio-economic status, with 32.2% lacking social security coverage. Twenty-one percent had never worn a prosthesis. Issues included post-amputation flexion contractures (84.7%), surgical revisions due to necrosis (22.5%), non-fit residual limbs (47.5%), and moderate neuropathic pain (43.7%). The median waiting time for prosthesis acquisition was 120 days. Twenty-eight percent of patients received prostheses they did not use, and 44.9% required adjustments due to maladjustment (28.6%) and intolerance (32.7%). Revision surgery was significantly associated with prosthesis acquisition ($p=0.033$). Good padding quality and absence of nociceptive pain were linked to better adherence ($p=0.002$ and $p=0.019$, respectively).

Conclusion: The study reveals significant factors affecting prosthetic device management in lower limb amputees, highlighting reasons for non-acquisition and abandonment of prostheses.

OC163. AN EPIDEMIOLOGICAL AND CLINICAL STUDY OF SEVER'S DISEASE IN REHABILITATION DEPARTMENTS.

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Introduction: Sever's disease (SD) is the most common cause of heel pain in children. The risk factors are varied. The treatment is symptomatic, but it must be above all preventive. The aim of our study was to describe the epidemiological and clinical characteristics and to determine the therapeutic modalities of (SD) in rehabilitation department.

Methods: Descriptive cross-sectional study including children examined for heel pain related to SD from 2014 to 2024. We determined the epidemiological and clinical characteristics, and therapeutic modalities.

Results: The study included 9 patients with a mean age of 10 years and a sex ratio of 3.5. Overweight and morpho-static foot disorders were the two main risk factors noted. Heel pain was often bilateral and asymmetric. X-rays revealed nonspecific signs of hyper-condensation and/or fissuring in 7 children. Management consisted essentially in stopping sports activities, prescription of analgesics and/or non-steroidal anti-inflammatory drugs (NSAIDs), and rehabilitation with the use of foot orthoses. The evolution was favorable with resumption of sports activity after a median of 12 months in 2 patients. One boy developed Achilles tendonitis 1 year after the onset of symptoms.

Conclusion: Although preventive treatment is the most important component in the management of SD, there is no denying in the effectiveness of rehabilitation.

OC164. A DESCRIPTIVE STUDY ON METATARSALGIA IN THE REHABILITATION DEPARTMENT

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Introduction: Metatarsalgia is a common condition causing pain in the metatarsal region and can significantly affect patients' quality of life. This study aims to describe the epidemiological and clinical characteristics of metatarsalgia and evaluate the management strategies used in a rehabilitation department

Methods: A descriptive study was conducted in the Physical Medicine and Functional Rehabilitation Department (MPR) over 3 months (January 2024 to March 2024).

Results: Fifty-two patients were analyzed with an average age of 44.6 years. Clinical examination revealed plantar hyperkeratosis in 42.3% and plantar callosities in 27%. Toe claw was observed in 16 cases. Podoscope findings showed 57.7% with hollow feet and 40.4% with flat feet. The 2nd ray syndrome was found in 17.3% of cases. Standard foot radiographs were performed in 28.8% of patients, and foot ultrasound in 3 of 4 diagnosed with Morton's neuroma. Static foot disorders were the most frequent etiology (83%), followed by Morton's neuroma (7%), Freiberg's disease (4%), and fatigue fractures (6%).

Corticosteroid injections were administered to 3 cases of inter-metatarsal neuralgia, while custom-made foot orthoses were prescribed to 88.6% of patients. Seven patients received physical therapy.

Conclusion: Metatarsalgia is prevalent among patients with foot problems, with diverse causative factors related to gait mechanics and foot deformities. An individualized treatment protocol is essential for effective management.

OC165. INTELLIGENT EHEALTH ENVIRONMENT FOR THE REHABILITATION OF CHILDREN WITH CEREBRAL PALSY

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Introduction: Machine Learning (ML) technologies play a role in facilitating the delivery of remotely therapeutic interventions. Over recent years, a range of Methods have been suggested to help in remote monitoring and intelligent support within rehabilitation services. Both supervised and unsupervised machine learning algorithms have been recognized as non-invasive motion capture technologies, identified as strategic applications that facilitate remote and intelligent monitoring. Thus, we aim to find a technological solution for rehabilitation of children with cerebral palsy (CP) by providing different types of therapy and facilitating ways for rehabilitation-based-home.

Methods: We propose an intelligent framework that aims to help patients by offering advanced Methods for personalized rehabilitation tailored to each patient's needs. This framework incorporates a Personalized Rehabilitation Environment (PRE) that exploits artificial intelligence to optimize treatment plans based on patient data and progress. on this basis, we suggest developing a system that recommends suitable treatment for each patient. we have therefore applied two different types of recommendation algorithms, one based on content, the other based on collaborative filtering.

Results: The following Results show the performance of the proposed algorithms. Algorithm 1 is better than Algorithm 2 in terms of accuracy, precision and F1 score. Algorithm1 (Accuracy = 0.87, Precision = 0.88, F1Score = 0.89) Algorithm2 (Accuracy = 0.77, Precision = 0.61, F1Score = 0.68)

Conclusion: The content-based recommendation algorithm is highly effective in identifying and recommending appropriate treatments to patients based on the inherent characteristics of the treatments within them.

OC166. HOW BRACING AFFECTS THE QUALITY OF LIFE FOR CHILDREN WITH IDIOPATHIC SCOLIOSIS

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Introduction: Idiopathic scoliosis (IS) is a common spinal condition in adolescents that often requires various treatments to manage curvature and improve outcomes. One such treatment is the Chêneau brace, used in conjunction with rehabilitation. This study aims to assess how wearing a Chêneau brace affects the quality of life (QOL) of adolescents with IS compared to those who receive only rehabilitation

Methods: A cross-sectional study conducted from September 2023 to February 2024 included adolescents with IS, divided into two groups: (G1) patients treated with a brace and rehabilitation, and (G2) patients receiving only rehabilitation. QOL was assessed using the QLPSD, SRS-22, and VAS QL. The correlation between QOL and factors such as correction angle, treatment duration, age, and Risser index was analyzed.

Results: The study involved 27 girls (56%) and 21 boys (44%) with a mean age of 14 ± 2 years. G2 showed better QOL scores on the QLPSD across all scales with significant differences. The VAS QL revealed a correlation between QOL and correction angle in brace wearers. The QLPSD indicated significant relationships between psychosocial status and age, correction angle, and treatment duration in brace wearers. Satisfaction on the SRS-22 was correlated with brace correction and treatment duration. **Conclusion:** Chêneau brace wear in adolescents with IS significantly decreases QOL, impacting adherence to the treatment by reducing the daily wear duration. Despite this, bracing remains an essential tool for managing IS.

OC167. QUALITY OF LIFE AND ASSOCIATED FACTORS IN LOW BACK PAIN PATIENTS DURING COVID19

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Introduction: Chronic low back pain is a common reason for physical medicine consultations. Few studies in Tunisia and the Arab world have assessed its impact during COVID-19 or examined factors affecting the quality of life (QoL) in these patients

Methods: We conducted a cross-sectional study at Fattouma Bourguiba University Hospital, Monastir, with 60 patients over two months (November-December 2021). Functional disability was measured with the Oswestry Disability Index (ODI), QoL with the Short Form Health Survey 12 (SF-12), sleep quality with the Pittsburgh Sleep Quality Index (PSQI), mood disorders with the Hospital Anxiety and Depression (HAD) scale, and fatigue with the Pichot score

Results: We included 60 patients, mean age 49.23 ± 14.82 years, 75% female, mean BMI 27.17 ± 5.47 kg/m². Of these, 38.3% had isolated chronic low back pain

(CLBP), 61.7% had sciatica. The mean ODI was $36.15\% \pm 15.3\%$, with 20% minimal, 40% severe, and 5% disabling. The mean QoL score (SF-12) was 43.57 ± 14.07 , with 85% having impaired QoL. The mean PSQI score was 7.56 ± 3.48 , with 58.3% having sleep disturbances. The mean HAD-D score was 8.6 ± 4 , with 33.3% showing definite depression, and the mean HAD-A score was 9 ± 5.5 , with 38.3% showing definite anxiety. The mean fatigue score (VAS) was 50 ± 22 mm, and the mean Pichot score was 15.18 ± 8.19 , with 28.3% experiencing excessive fatigue (Pichot score >22).

Conclusion: QoL appears more affected in Tunisian CLBP patients during the COVID-19 pandemic. Main factors include pain intensity, functional disability, poor sleep quality, depression, and anxiety

OC168. EFFICACY OF MESOTHERAPY IN MANAGING JOINT-RELATED PAIN: A RETROSPECTIVE STUDY

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Introduction: Mesotherapy is increasingly used in managing persistent joint-related pain, offering an effective alternative to conventional treatments with fewer systemic side effects. Aim: This study aims to evaluate the efficacy of mesotherapy in reducing osteoarticular pain in patients.

Methods: A retrospective study was conducted at the Mohamed Kassab Orthopedic Institute's Department of Physical Medicine and Rehabilitation between January 2022 and December 2023. All patients receiving mesotherapy for osteoarticular pain were included, except those with incomplete records. The efficacy of mesotherapy was assessed using the numeric pain rating scale (NPRS) before and after treatment.

Results: The study included 40 patients with an average age of 55.8 years and a gender ratio of 1 male to 4 females. Mesotherapy was primarily indicated for low back pain or sciatica (42.5%) and neck pain or cervicobrachial neuralgia (37.5%). Post-treatment, 72.5% of patients reported over 60% improvement in NPRS, 15% reported partial improvement (20-60%), and 5% reported no improvement. Additionally, 58% of patients with low back pain or sciatica showed improvement in lumbar spine mobility, 73% of patients with neck pain or cervicobrachial neuralgia had improved cervical spine mobility, and 60% of patients with knee pain or shoulder tendinopathy showed improved joint mobility.

Conclusion: Mesotherapy is an effective, low-cost, reproducible, and low-risk method for treating joint-related pain. It should be used alongside other therapeutic Methods such as functional rehabilitation and medication to ensure better efficacy.

OC169. INJURY PATTERNS IN THE 2021 AFRICAN CUP OF NATIONS FOOTBALL COMPETITION: A VIDEO-BASED PROSPECTIVE ANALYSIS

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Introduction: Football is the most popular sport in the world. While practicing football has various health benefits, it also carries a considerable risk of injuries. There is a lack of data on injuries related to the African Cup of Nations (AFCON). This study aims to describe injuries in football players during the 2021 AFCON.

Methods: Data related to injuries were collected via a prospective video-based analysis of the 52 matches. Analyzed parameters included injury incidence per 1000 match hours, body location, injuries occurrence per stadium zone (defense, midfield, and attack), injuries per competition stage, and referee decision.

Results: During the competition, 87 injuries were reported, with an incidence of 48.8 injuries per 1000 match hours. The mean age of injured players was 26.4 ± 4 years. The most commonly injured body location was the thigh (20.6%), particularly the hamstring. These injuries occurred most frequently in the midfield stadium zone (39.1%), followed by the defense zone (37.9%). Injury incidence increased from the group stage to the finals. The referee's decision was a foul for in 44.8% of cases and a foul against in 5.7%.

Conclusion: The study highlights a significant incidence of injuries during the 2021 AFCON, with the thigh being the most injured body part and injuries occurring most frequently in the midfield zone. These findings underscore the need for targeted injury prevention strategies, particularly focusing on the later stages of the competition.

OC170. CERVICOGENIC HEADACHE INTENSITY IN CERVICAL RADICULOPATHY PATIENTS: CORRELATIONS WITH RANGE OF MOTION, PROPRIOCEPTION, AND MUSCLE STRENGTH

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Introduction: Cervicogenic headache (CGH) is a prevalent issue among patients with cervical radiculopathy (CR), often impacting their quality of life. Analyzing the correlation between CGH intensity and various physical parameters can provide insights for better clinical management. This study aims to analyze the correlation between CGH intensity and CR intensity, range of motion, proprioception, neck muscle strength, and functional performance in patients with CR.

Methods: A total of 50 patients diagnosed with both

CR and CGH were included in this study. Data collected comprised demographic information, range of motion and proprioception using an inclinometer, neck muscle strength using a dynamometer (MicroFET2), and functional performance using the Jamar handheld dynamometer. Correlation analysis was conducted using the Spearman test.

Results: The mean age of the included patients was 46.3 years. The mean intensity of CGH was 55.2±9.64, with a frequency of 5.6 days per week. A moderate positive correlation was found between CGH intensity and CR intensity ($r=0.423$; $p=0.002$). There was a moderate negative correlation with proprioception in flexion ($r=-0.401$; $p=0.012$) and extension ($r=-0.411$; $p=0.020$). Weak correlations were observed with range of motion, neck muscle strength, and handgrip strength.

Conclusion: The intensity of CGH in patients with CR is moderately correlated with the intensity of CR and proprioception alteration. These findings highlight the importance of CR related pain management and proprioception rehabilitation in the management of CGH.

OC171. PREVALENCE AND ASSOCIATED FACTORS OF CERVICOGENIC DIZZINESS IN PATIENTS WITH CERVICAL RADICULOPATHY: A CROSS-SECTIONAL STUDY

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Introduction: Cervicogenic dizziness is a type of vertigo associated with cervical spine dysfunction, particularly prevalent among patients with cervical radiculopathy. Understanding the prevalence and associated factors of cervicogenic dizziness can aid in better management and treatment. This study aims to determine the prevalence of cervicogenic dizziness and identify its associated factors in patients with cervical radiculopathy.

Methods: A cross-sectional study was conducted on 86 patients diagnosed with cervical radiculopathy. Collected data included demographic information, pain intensity, cervical range of motion, proprioception, neck muscle strength, and functional performance. Statistical analyses were performed to compare patients with and without cervicogenic dizziness.

Results: The prevalence of cervicogenic dizziness among the studied patients was found to be 69.8%. There were no significant differences between patients with and without cervicogenic dizziness in terms of age, BMI ($p=0.401$), ROM ($p>0.050$) and neck proprioception ($p>0.050$). However, significant associations were found between cervicogenic dizziness and neck extensor muscle weakness ($p=0.038$) as well as altered handgrip strength ($p=0.001$).

Conclusion: Cervicogenic dizziness is a common condition among patients with cervical radiculopathy, and its occurrence is significantly associated with neck extensor

weakness and altered handgrip strength. These findings highlight the importance of assessing and addressing neck muscle strength and handgrip function in the management of cervicogenic dizziness.

OC172. INTERSTITIAL LUNG DISEASES: IMPACT OF RESPIRATORY REHABILITATION ON QUALITY OF LIFE

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Introduction: Interstitial lung diseases (ILD) are considered chronic progressive diseases with a significant impact on the quality of life (QOL). The objective of this study was to demonstrate the impact of respiratory rehabilitation on the QOL of patients suffering from ILD.

Methods: A prospective study was conducted on nine patients with ILD, followed in the pulmonology department of Mongi Slim La Marsa University Hospital, from February 1 to April 30, 2024. An initial assessment of QOL was carried out using the Leicester Cough Questionnaire (composed of 3 domains: physical, psychological, and social; highest score associated with the best QOL) and the Saint Georges Questionnaire (composed of 3 components: symptoms, activities, and impacts; the lowest score is associated with the best QOL). A respiratory rehabilitation protocol was then proposed, including: nutritional evaluation, breathing awareness, exercise retraining, muscle strengthening, proprioception, muscle stretching and therapeutic education. This protocol was spread over six weeks followed by a final evaluation eight weeks after the initial evaluation.

Results: The mean age of the patients collected was 62 years (six men and three women). The etiologies of ILD were: idiopathic pulmonary fibrosis ($n=5$), SCL-ILD ($n=1$), RA-ILD ($n=1$), sarcoidosis ($n=1$) and hypersensitivity pneumonitis ($n=1$). At the end of the six weeks of the protocol, a statistically significant improvement was observed in terms of QOL: improvement in the score obtained on the Saint-Georges Questionnaire ($p=0.002$) and the Cough Questionnaire ($p=0.006$).

Conclusion: Respiratory rehabilitation has demonstrated its positive impact on the QOL of patients with ILD regardless of its etiology.

OC173. PROFILE OF PATIENTS WITH TYPE 2 DIABETES AT THEIR FIRST NEPHROLOGY VISIT

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Introduction: Chronic kidney disease (CKD) is a severe complication of type 2 diabetes and is the leading cause of end-stage renal disease worldwide. Often asymptomatic, CKD is a critical turning point in the life of

a diabetic patient. Early identification of patients at risk of developing this complication, as well as understanding their clinical and demographic profile, is crucial for optimized management.

Methods: We retrospectively analyzed the medical records of newly diagnosed CKD patients between 2013 and 2023. We collected demographic characteristics, family history, and comorbidities at the first consultation.

Results: We included 133 patients. The average age was 65.9 ± 9.5 years, with a genre ratio of 1.33. Family history was dominated by diabetes (59.4%) and hypertension (54.1%). The average age at diabetes onset was 50 ± 12.2 years. Diabetic retinopathy was present in 72.2% of cases, and diabetic neuropathy in 59.4% of cases. In terms of macroangiopathies, 9% of patients had a history of stroke, 30.8% had coronary artery disease, and 18.8% were followed for peripheral arterial disease. One hundred twenty-four patients (93.2%) had hypertension, with an average duration of 11.5 ± 8.7 years. Dyslipidemia was noted in 64.7% of cases, and heart failure in 17.3% of cases.

Conclusion: This study highlights the importance of early identification of patients at risk of diabetic kidney disease and the need for a multidisciplinary approach to prevent its progression

OC174. PHARMACOTHERAPEUTIC PROFILE AND BLOOD PRESSURE CONTROL IN HYPERTENSIVE DIABETIC PATIENTS FOLLOWED IN NEPHROLOGY

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Introduction: Hypertension and diabetes are two frequently associated chronic diseases that increase the risk of renal and cardiovascular complications. Optimal management of these patients requires a rigorous pharmacotherapeutic approach and effective blood pressure (BP) control. The objective of this study is to determine the most commonly used therapeutic regimens and their effectiveness in terms of BP control.

Methods: This retrospective study analyzed the medical records of hypertensive type 2 diabetic patients followed in a nephrology department between 2013 and 2023. The collected data included demographic characteristics, prescribed antihypertensive treatments, and BP values.

Results: We collected data from 124 records. The mean age was of 63.7 ± 9.4 years, with a gender ratio (M/F) of 1.25. Renin-angiotensin system blockers (RASBs) were the most prescribed class of antihypertensives (68%). A combination of antihypertensive treatments was prescribed in 80% of patients. Among them, 40% were on dual therapy and 30% on triple therapy. In monotherapy, angiotensin-converting enzyme inhibitors were most frequently prescribed (58%), followed by calcium channel blockers (33%). The most common dual therapy combination was a RASB and a calcium channel blocker. In triple therapy, the most frequent combination was

a RASB, a calcium channel blocker and a beta-blocker. After one year, 59% of patients had balanced their blood pressure, with a mean systolic BP of 135 ± 18 mmHg and a mean diastolic BP of 77 ± 11 mmHg.

Conclusion: The Results of this study highlight the importance of appropriate pharmacotherapeutic management and regular follow-up to ensure optimal blood pressure control in hypertensive diabetic patients.

OC175. IMPACT OF EARLY POST-TRANSPLANT HYPOPHOSPHATEMIA ON RENAL FUNCTION: INSIGHTS FROM A SINGLE-CENTER COHORT

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Introduction: Hypophosphatemia is common during the first year following renal transplantation, but its clinical implications are not well understood. This study aims to examine the relationship between post-transplant hypophosphatemia and renal function in a cohort of kidney transplant recipients with long-term follow-up.

Methods: A single-center, retrospective cohort study was conducted at the nephrology department of La Rabta Hospital, including 80 renal transplant patients who underwent transplantation between 2010 and 2020. Hypophosphatemia was defined as a serum phosphate level at or below the lowest quartile at 1, 3, and 12 months post-transplantation. Cumulative renal survival rates were calculated for each group using the Kaplan-Meier method.

Results: The median age of the patients was 35.12 years [19-64], with a male-to-female ratio of 1:8. All patients received a kidney from a living-related donor. No patients experienced acute rejection episodes. Six patients returned to dialysis. At 12 months post-transplant, the average serum phosphate level was 0.9 mmol/L, average serum calcium was 2.3 mmol/L, and average creatinine was 150 μ mol/L. Hyperparathyroidism was present in 36% of the patients. Hypophosphatemia at 12 months post-transplantation, defined as a serum phosphate level of 0.7 mmol/L (first quartile), was observed in 26% of the patients. These patients had an average creatinine level of 79 μ mol/L at 12 months.

Conclusion: Our Results suggest that early post-transplant hypophosphatemia is associated with better renal function.

OC176. CLINICO-BIOLOGICAL PROFILE AND PROGRESSION OF DIABETIC NEPHROPATHY

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Introduction: Diabetes remains a worldwide health issue, with 30-40% of diabetic patients developing

diabetic nephropathy (DN). A good understanding of its clinico-biological evolution is essential to optimize its management and prevent progression to end-stage renal disease.

Methods: We retrospectively analyzed the medical records of patients with DN between 2013 and 2023. We collected evolving clinical and biological data. Rapid progression of renal function was defined as an annual decline in creatinine clearance greater than 5 ml/min/1.73 m²/year (MDRD).

Results: One hundred and thirty nine patients were included. The mean age of our population was 64.64 ± 11.17 years, with a slight male predominance (56%). seventy four percent of the patients had a creatinine clearance < 60 ml/min/1.73 m², and 29% had an HbA1c > 8%. Follow-up was irregular in 27% of cases and 9% were non-adherent to treatment. Several intercurrent events were noted: acute renal failure (37%), infection (14%), acute coronary syndrome (7%), iodine contrast injection (14%), heart failure (8%), and decompensated cirrhosis (1%). The median value of renal function progression was 5.47 umol/l, with rapid progression in 46% of patients. Blood pressure control was achieved in 62% of patients at the last consultation, and diabetes control in 70%. End-stage chronic renal failure was reached in 13 patients (13%) with a mean time to onset of 29.38 ± 14.15 months.

Conclusion: These Results highlight the complex evolution of diabetic nephropathy characterized by a gradual decline in renal function. Identifying these evolutionary factors is necessary to limit the progression of this disease.

OC177. CLINICO-BIOLOGICAL PROFILE OF FOCAL SEGMENTAL GLOMERULOSCLEROSIS AT THE FIRST CONSULTATION

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Introduction: Focal segmental glomerulosclerosis (FSGS) is a histopathological entity characterized by podocyte injury, leading to a loss of the integrity of the glomerular filtration barrier. The diverse clinical manifestations makes its diagnosis particularly challenging, highlighting the crucial importance of renal biopsy.

Methods: A descriptive study was conducted with retrospective data collection, spanning from 2015 to 2022. We included all patients who underwent a renal biopsy showing aspects of FSGS. Clinical and biological data were collected from medical records.

Results: Our study included 37 patients. The mean age was 34.84 ± 15.45 years, with a gender ratio F/M of 1.31. Medical history revealed hypertension (8%), diabetes (3%), and hepatitis C (3%). Four patients had a history of corticosteroid-resistant nephrotic syndrome since childhood, prompting the renal biopsy. Twenty-six patients (70%) presented with nephrotic syndrome impure in 77% of cases. The most common impurity

criteria were hematuria (58%), followed by renal failure (38%) and hypertension (27%). Dyslipidemia was noted in 25 patients, with a mean total cholesterol level of 9.6 ± 3.8 mmol/L and a mean triglyceride level of 2.8 ± 1.6 mmol/L. Among the sixteen patients with renal failure, with a median creatinine level of 190 μmol/L ; 43.75% had nephron reduction [30% - 90%] and mild interstitial fibrosis and tubular atrophy estimated at 40-70%.

Conclusion: This study highlights the complex clinico-biological profile of FSGS at the first consultation. A thorough understanding of these aspects is important for early diagnosis and effective management.

OC178. CLINICO-BIOLOGICAL PROFILE OF EXTRA-MEMBRANOUS GLOMERULONEPHRITIS AT THE FIRST CONSULTATION

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Introduction: Membranous glomerulonephritis is a glomerular nephropathy characterized by thickening and deposition of immune complexes in the glomerular basement membrane. It is the leading cause of nephrotic syndrome in non-diabetic adults and progresses to end-stage renal disease in 30-40% of cases. The aim of this study is to analyze the clinical presentation and demographic characteristics of these patients.

Methods: We extracted retrospectively demographic and clinico-biological data from the medical records of patients who underwent renal biopsy showing membranous glomerulonephritis, between 2015 and 2022.

Results: The study included 33 patients characterized by a M/F sex ratio of 1.2 and an average age of 48.03 ± 14.56 years. Past history was notable for systemic lupus erythematosus (9%), hypothyroidism (9%) and autoimmune thyroiditis (6%). Clinical presentation was dominated by nephrotic syndrome (75%), impure in 21 patients by hematuria (81%) and/or renal failure (43%) and/or hypertension (38%). Five patients had glomerular hyperfiltration (creatinine clearance > 120 ml/min/1.73 m² according to MDRD). Of the 14 patients with renal failure, three had nephron reduction at 44%, 55% and 60% respectively, and interstitial fibrosis and tubular atrophy with a median of 69%. The median creatinine level in these patients was 63.3 mg/l.

Conclusion: This study highlights the multiple facets of membranous glomerulonephritis presentation. Better knowledge of this pathology is necessary for early identification and effective management of these patients.

OC179. PREVALENCE AND RISK FACTORS OF ANAEMIA AFTER KIDNEY TRANSPLANTATION

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Introduction: Anaemia is a risk factor for mortality and graft loss in kidney transplant recipients (KTRs). The aim of this study was to determine the prevalence of anaemia and associated risk factors in kidney transplant recipients.

Methods: It was a retrospective study conducted at the Rabta hospital between 2012 and 2019 which included 64 KTRs. Patients returning to dialysis after failed transplant were excluded. Anaemia was defined as hemoglobin <13.0 g/dL in men and 12.0 g/dL in women.

Results: A total of 54 KTRs were included (35 male and 19 female). The median age was 34 years [17,58]. The median follow-up after kidney transplantation was 7.5 years. All patients were treated with a similar immunosuppressive regimen consisting of a calcineurin inhibitor, mycophenolic acid and corticosteroids. Anaemia was present in 79.6% of patients within the first month after kidney transplantation, and its prevalence dropped to 5.6% at one-year post-transplantation. At last follow-up, 13 patients had anaemia (24.1%). Iron deficiency was diagnosed in three patients (23% of anaemic patients). In univariate study, age was associated with the presence of anaemia in the KTRs ($r=0.34$, $p=0.01$). Time-to-recovery to normal adult hemoglobin value was higher in patients having an older donor. Anaemic and non-anemic patients showed similar risk to have an infection and graft dysfunction.

Conclusion: Anaemia remains highly prevalent in KTRs, which requires more attention to its management

OC180. ACUTE RENAL INJURY IN THE CARDIAC CARE UNIT

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Introduction: Acute renal injury (AKI) is a common complication in the cardiac care unit (CCU). Its prevalence is expected to grow rapidly over the next few decades. The aim of our work was to study the etiologies and management of ARF in the CCU.

Methods: We conducted a descriptive study including all patients hospitalized in the CCU during the months of March and April 2024. The AKI was defined according to the recommendations of "Kidney disease: improving global outcomes". In total, 250 patients were hospitalized during the study period. 50 patients (20%) developed AKI. The average age was 70 years [46-94]. The sex ratio (male/female) was 1.3. Hypertension was found in 50% ($n=25$) of the cases and diabetes in 56% ($n=26$) of the cases. Chronic kidney disease was present in 14% of the cases. 30% of the patients had coronary insufficiency and 26% had heart failure. The main reasons for hospitalization

were acute coronary syndrome (44%) followed by acute heart failure (32%). Coronary angiography was performed in 44% of patients. The main causes of AKI were contrast-induced nephropathy (34%) and cardiorenal syndrome (30%). Management was based on hydration by isotonic saline in 42% of patients and administration of loop diuretics in 30% of cases. 12% of patients had required dialysis.

Conclusion: A monitoring of renal function, appropriate management and prevention of kidney disease are crucial in the management of patients hospitalized in the CCU.

OC181. LYMPHOCYTE COUNTS AND INFECTION RATES IN KIDNEY TRANSPLANT PATIENTS

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Introduction: Kidney transplantation is still facing a high morbidity rate due to the high risk of infection. Our aim was to analyse the association between the lymphocyte counts (LC), monitored routinely during outpatient visits and the risk of infection, in this population.

Methods: It was a retrospective study including transplant recipients from the nephrology department of the Rabta hospital between 2012 and 2019. We investigated the association between LC during one year after transplantation and the occurrence of viral or bacterial infection. We excluded patients who had been treated for rejection or neoplastic disease during the follow-up.

Results: Sixty patients with a median follow-up of 81,5 months [28-140] were included with a sex ratio (M/F) of 2,15. The mean age was 35.1 +/- 10.4. All patients had their LC increase after induction therapies, but only ten patients still had lymphopenia under 500 at the third month and LC was under 1000 in 36.6% (22) of cases at the sixth month. At one year after transplantation, 26 (43.3%) had reached a normal LC (over 1500/mm³), only one patient had deep lymphopenia (under 750/mm³). Patients with the lowest LC at the first month after KT were more exposed to early viral infection ($p=0.01$). The occurrence of bacterial or viral infection within a patient's follow-up was significantly related to the presence of pretransplant lymphopenia ($r=0.32$, $p=0.01$) which was presented in 46.7% of cases.

Conclusion: The lymphocyte count could be a predictor and prognostic factor for infections occurrence in kidney transplant recipients.

OC182. PREDICTION OF DELAYED GRAFT FUNCTION WITH NEUTROPHIL-LYMPHOCYTE RATIO

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Introduction: Delayed graft function (DGF) is a frequent complication following kidney transplantation. The aim of this study was to evaluate the association between neutrophil-to-lymphocyte ratio (NLR) and early graft function.

Methods: We retrospectively analysed the preoperative white blood cell count of patients who underwent living donor kidney transplantation (KT) at Rabta Hospital, between 2010 and 2019. We measured preoperative levels of lymphocytes and neutrophils and their ratios (NLR). NLR was calculated by dividing the absolute neutrophil count by the absolute lymphocyte count. DGF was defined as the need for dialysis during the first week after transplantation.

Results: A total of 63 kidney transplant recipients (42 males, 21 females) with a median age of 33 [17-57] years and a median follow up of 7 years, were included. The mean preoperative NLR was 2.42. Six out of the 63 recipients were diagnosed with DGF. The median time-to-nadir serum creatinine was 32.4 days and the mean creatinine level was 14,2mg/l. The mean value of NLR was higher in patients who had DGF (NLR=3.63) compared to those who did not (NLR=2.79). However, the difference was not statistically significant. Creatinine at last follow-up after transplantation was significantly higher in those who had DGF compared to those who did not ($p=0.001$). Univariate analysis revealed that higher preoperative neutrophil count ($p=0.004$) as well as lower NLR ($p=0.046$, $r=-0.25$) were associated with better graft survival.

Conclusion: Preoperative NLR and neutrophil count could represent a promising predictive biological marker for DGF.

OC183. ITERATIVE RENAL BIOPSIES IN LUPUS PATIENTS

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Introduction: Emerging data from observational cohort studies suggest that iterative biopsies may reflect the severity and extent of renal histological lesions. The aim of our study is to investigate the relationship between iterative renal biopsies and renal prognosis.

Methods: We retrospectively reviewed the records of 60 patients with histologically confirmed diffuse proliferative lupus nephritis via renal biopsy.

Results: The mean age of the patients was 31 years \pm 9 years, ranging from 15 to 51 years, with a predominance of females. Thirty-nine patients, or 65% of cases, were known to have lupus prior to the management of class IV lupus nephritis. Among these, 24 patients had renal involvement. Fourteen patients had previously undergone a renal biopsy. The Results of these previous biopsies were as follows: one biopsy concluded class II, one class III, five biopsies class IV, six biopsies class V, and one biopsy showed a combination of class III+V. Our study Results conclude that iterative renal biopsy is

a significant risk factor associated with the progression to end-stage chronic renal failure. Our findings align with some studies suggesting that iterative biopsies are often performed on patients with recurrent renal flares and pre-existing chronic lesions, which may explain this positive correlation.

Conclusion: Although iterative renal biopsy is an invasive procedure, it remains a crucial tool for visualizing and evaluating renal histological lesions, thereby guiding therapeutic decisions and improving renal prognosis.

OC184. PERIPHERAL NEUROPATHY IN SYSTEMIC DISEASES.

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Introduction: Peripheral neuropathy is a common manifestation of systemic diseases. This study aimed to describe the different etiologies of peripheral neuropathies and their treatment.

Methods: A retrospective, descriptive study was conducted in the Rabta University Hospital Center, using the medical records of patients admitted to the internal medicine department over 14 years.

Results: The study included 42 patients: 54% were women and 46% were men. The mean age was 49 years [27-71]. Primary Sjögren's syndrome was diagnosed in 30% of the cases, systemic lupus erythematosus in 25%, granulomatosis with polyangiitis in 20%, scleroderma with associated Sjogren in 10%, eosinophilic granulomatosis with polyangiitis in 5%, mixed cryoglobulinemia in 5%, and mixed connective tissue disease in 5%. A combination of sensory and motor impairment was found in 86% of the study population, isolated motor impairment, and isolated sensory impairment were both seen in 7% of cases. Axonal damage was found in 90% of cases, and small fibre damage was found in 10% of cases. Seventy per cent of the patients had polyneuropathy and 30% had mononeuropathy. Symptoms included tingling (40%), hypoesthesia (45%), and burning sensations (15%). These symptoms were located in the lower limbs (60%), all four limbs (33%), and the upper limbs (7%). All patients received oral corticosteroid treatment, cyclophosphamide courses, and pregabalin. Paresthesia disappeared in 40% of the cases, and symptom improvement was observed in 60% of the cases.

Conclusion: Sjogren's syndrome is the most common disease-inducing peripheral neuropathy. The coexistence of sensory and motor impairment is the most frequent observed pattern.

OC185. OPTICAL COHERENCE TOMOGRAPHY ANGIOGRAPHY FINDINGS IN ANGIOID STREAKS

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Introduction: Angioid streaks (AS) result from breaks in the Bruch's membrane. They are associated with various systemic conditions and can lead to significant visual impairment. Optical coherence tomography (OCT) has been instrumental in visualizing AS. The advent of optical coherence tomography angiography (OCT-A) provides a more detailed assessment of vascular changes. Thus, our aim was to describe OCT-A findings in angioid streaks.

Methods: Prospective observational study including 12 patients (21 eyes) at various stages of AS. Patients underwent a comprehensive ophthalmologic examination, including best-corrected visual acuity (BCVA), slit-lamp examination and fundus photography. OCT and OCT-A and fluorescein angiography were performed.

Results: En face OCT detected hyper-reflective points in 58% of cases, with a corresponding choriocapillaris (CC) shadow on OCT-A. Diffuse CC rarefaction was observed in 90% of cases. In eyes without neovascular complications, streaks appeared as a hyposignal in the outer retina. Choroidal neovascularization (CNV) was present in 24 eyes: type 1 in 8%, type 2 in 43%, mixed in 20%, and unclassified in 29% due to large scars. Multiple CNV sites were found in 8% of cases. The CNV shape was tangled in 66% of cases, including two eyes with newly diagnosed CNV. OCT-A revealed a perilesional halo around new CNV. The morphology and configuration of the neovascular network followed the intraretinal neovascularization pattern and the path of the AS, arising near sites of Bruch's membrane disruption.

Conclusion: OCT-A facilitates early detection and monitoring of AS and their neovascular complications. However, there are limitations in accurately characterizing signs of CNV activity.

OC186. MULTIMODAL IMAGING IN HYDROXYCHLOROQUINE INDUCED MACULOPATHY

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Introduction: Hydroxychloroquine (HCQ) has long been a cornerstone in the management of autoimmune diseases such as rheumatoid arthritis and systemic lupus erythematosus. However, the drug's association with retinal toxicity, specifically HCQ-induced maculopathy, presents a complex challenge in clinical practice. In recent years, the advent of multimodal imaging techniques has revolutionized our ability to diagnose and monitor HCQ maculopathy with unprecedented detail and sensitivity. Thus, the aim of our study was to describe multimodal

imaging in patients with hydroxychloroquine induced maculopathy

Methods: We conducted a prospective cross-sectional descriptive study involving 61 patients treated with HCQ for more than 6 months at the ophthalmology department of the Tunis Main Military Instruction Hospital over an 18-month period from January 2022 to June 2023. A screening protocol for HCQ maculopathy, inspired by the recommendations of the American Academy of Ophthalmology, was applied to each patient in order to detect HCQ induced maculopathy.

Results: Among the 61 patients treated with HCQ in our study, five cases of HCQ maculopathy were detected. One case of 'bull's-eye' maculopathy and four cases of early to moderate maculopathy were observed. Both visual field (VF) and multifocal electroretinogram (mfERG) tests were abnormal in all 5 patients. Fundus autofluorescence (FAF) imaging abnormalities were detected in three of these cases with two case of mottled macular appearance and one case of decreased pericentral FAF.

Conclusion: Multimodal imaging offers a considerable help for clinicians as their use can identify subtle morphological changes that signal HCQ toxicity at earlier stages, potentially before irreversible visual damage occurs.

OC189. HYDROXYCHLOROQUINE INDUCED MACULOPATHY AMONG TUNISIAN PATIENTS

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Introduction: Synthetic antimalarial drugs (such as Hydroxychloroquine (HCQ)) are widely used for treating various inflammatory conditions. HCQ-induced maculopathy, though rare, is a significant complication, potentially leading to severe, irreversible bilateral visual acuity loss, even progressing after treatment cessation. Thus, our aim was to describe the epidemiology of HCQ-induced maculopathy among Tunisian patients.

Methods: We conducted a prospective cross-sectional study involving 61 subjects treated with HCQ for over 6 months at the ophthalmology department of the military hospital in Tunis from January 2022 to June 2023. Sociodemographic data, treatment characteristics, and a screening protocol for HCQ-induced maculopathy based on the guidelines of the American Academy of Ophthalmology were collected.

Results: The average age of patients in our study was 47.59 +/- 11.02 years with a sex-ratio of 0.26. Most patients were being treated for systemic lupus erythematosus (65.5%), followed by Sjogren's syndrome (22.9%), sarcoidosis (4.9%), rheumatoid arthritis (3.2%), and juvenile idiopathic arthritis (3.2%). All patients received hydroxychloroquine (Plaquenil®), averaging 7.43 +/- 3.55 years of treatment and a mean cumulative dose of 984.51 +/- 406.08 g. HCQ average daily dose was 5.07 +/- 1.41 mg/kg/day. Nine cases of suspected

HCCQ-induced maculopathy were identified, confirmed by multifocal electroretinogram and autofluorescence imaging in five patients, yielding a prevalence of 8.1%. All affected patients were female with an average age of 50.2 years, treated for over five years with APS, averaging 5.892 mg/kg/day.

Conclusion: HCCQ-induced maculopathy is a serious but preventable complication through systematic screening, highlighting the need for an effective collaboration between ophthalmologists and internists.

OC190. PHYSICAL ACTIVITY ASSESSMENT AND INFLUENCING FACTORS IN PATIENTS WITH SPONDYLOARTHRITIS

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Introduction: Spondyloarthritis (SpA) is a group of chronic inflammatory diseases characterized by common genetic, clinical, and radiological abnormalities. It predominantly impacts young adults, leading to restrictions in physical activity and a significant deterioration in quality of life. This study aimed to assess physical activity levels in SpA patients and investigate influencing factors.

Methods: This was a cross-sectional study including SpA patients diagnosed according to ASAS 2009 criteria. Physical activity was assessed using the International Physical Activity Questionnaire-Short form (IPAQ-S).

Results: Twenty-one patients were interviewed (19 men and 2 women). The mean age was 38.38 years [28–55], and the mean age at disease onset was 32.57 years [23–45]. The mean disease duration was 5.93 years [1–28]. Eleven patients were smokers. The mean BMI was 24.49 kg/m² ± 3.73. Inflammatory bowel disease, uveitis, and coxitis were present in 2, 3, and 6 patients, respectively. Mean MET/min/week for intense, moderate, and light activities were 155.80 ± 271.79, 1120.64 ± 562.85, and 4225.27 ± 2206.80, respectively. Total MET/min/week was 3183.47 ± 5943.12. Six patients were inactive, 11 moderately active, and 4 very active. Inactivity was associated with age, age at onset, and inflammatory bowel disease (p=0.019). BASDAI and ASDAS (CRP) scores were lower in active patients but without significant differences (p=0.67)(p=0.93). No other significant differences were found for other disease parameters (gender, disease duration, coxitis, and treatment).

Conclusion: Despite moderate physical activity levels, a significant proportion of patients were inactive. Inactivity is related to age, age at disease onset, and comorbidities such as inflammatory bowel disease. Disease activity did not significantly affect activity levels.

OC191. HERNIATED DISC SURGERY IN CHILDREN AND ADOLESCENTS: CASE SERIES AND REVIEW

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Introduction: Despite its frequency in adults, lumbar disc herniation(LDH) is a rare condition in children and adolescents. Its etiopathogenesis, clinical presentation, and management are very specific as well. The aim of this work was to describe the clinical, paraclinical, and prognostic characteristics of LDH treated surgically in adolescents.

Methods: Fifteen patients aged under 19 years old were included retrospectively from the neurosurgery department of the military hospital of Tunis. Medical records were reviewed from January 2012 to December 2019.

Results: The mean age at diagnosis was 16.6 years. There was a male predominance with a male-to-female ratio was 2:1. A previous traumatic episode was found in 40%.The presenting symptom was a unilateral monoradiculopathy in all cases: type L5 in 80% and type S1 in 20% associated with radicular claudication in 26%.The rachidian syndrome was major in 60% and the Lasègue's sign was tight in 40%. Lumbar imaging found in 20% a double LDH L4-L5 and L5-S1, in 60% an LDH L4-L5 associated in 26% with a narrow lumbar canal, and in 20% a single LDH L5-S1.In 40% of the cases, the LDH was particularly voluminous.In our series, a single-stage interlaminar approach was proposed in 60% and a two-stage approach in 13.3%. Four cases of narrow lumbar canal aggravated by LDH were treated with an interspinous approach.The duration of follow-up varied between 6 and 24 months. All patients showed an improvement in sciatica.

Conclusion: Unknown symptomatic LDH in adolescents may have an important functional and social impact. An early and specialized management is necessary to make the surgical indication in time.

OC192. THE MANAGEMENT OF TNF INHIBITORS IN PERIOPERATIVE CARE: ASSESSING THE KNOWLEDGE OF ORTHOPEDIC SURGEONS IN TUNISIA

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Introduction: To assess the knowledge and attitudes of Tunisian orthopedic surgeons regarding the perioperative Tumor necrosis factor α inhibitors (TNFi) management.

Methods: We conducted a cross-sectional descriptive study among Tunisian orthopedic surgeons. Participants were invited to answer an anonymous web-based questionnaire composed of 16 questions.

Results: A total of 50 surgeons responded to the questionnaire (46 men and 4 women). Participants were as follows: 40% residents (n=20), 31% orthopedic surgeons in the public sector and 29% orthopedic surgeons in

the private sector. According to participants, surgery was elective in 92% (n=46) of cases. Infliximab was the most known TNFi among surgeons (60%). Fifty-eight per cent of participants (n=24) agreed that TNFi should be temporarily discontinued prior to surgery and 42% (n=21) of them believe that this decision depends on disease activity. According to 20% of them (n=10), TNFi therapy should be stopped for five times the half-lives. However, 66% (n=33) of the participants had no idea about the perioperative management of this drug. During the pre-operative preparation, 82% (n=41) of orthopedics seek the advice of rheumatologist and 10% of them (n=5) ask for the anesthetists' opinion. After orthopedic surgery, only 30% (n=15) of participants believed that TNFi can be resumed once the wound has healed. Overall, 92% (n=46) of orthopedic surgeons considered their academic training about the perioperative management of TNFi is inadequate and poor.

Conclusion: we noted a modest level of knowledge among orthopedic surgeons regarding the perioperative use of TNFi, which underscore the need to upgrade the quality of training for these physicians.

OC194. LITERATURE REVIEW ON THE USE OF ARTIFICIAL INTELLIGENCE IN OCCUPATIONAL MEDICINE

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Introduction: Artificial Intelligence (AI) is transforming occupational medicine by improving disease prediction, diagnostic accuracy, and workplace health management. This review explores the current applications, benefits, limitations, and future directions of AI in this field.

Methods: A literature review was conducted on MEDLINE/PubMed, Scopus, Web of Science, and Cochrane databases from 2017 to 2023. Keywords included "Artificial Intelligence," "occupational medicine," "disease prediction," "diagnostics," and "workplace health." Selected studies were analyzed to assess AI's impact.

Results: Disease Risk Assessment: AI models analyze health records and workplace conditions to predict occupational disease risks, aiding in early detection and intervention. •Diagnostic Accuracy: AI enhances diagnostic processes by analyzing medical images, such as X-rays, with superior speed and accuracy compared to human Methods. •Workplace Health Monitoring: Wearable AI-enabled devices track workers' physiological data, providing real-time health monitoring and early warning. •Treatment Protocols: AI supports the development of treatment protocols by analyzing outcomes and optimizing strategies based on data. •Hazard Reduction: AI detects workplace hazards through pattern analysis in sensor data, improving safety and

preventing accidents. Ethical and Legal Issues AI's use raises concerns about data privacy, algorithmic bias, and the need for transparent, accountable systems.

Conclusion: AI can significantly improve occupational health by advancing disease prediction, diagnostics, and safety. Addressing ethical and implementation challenges is essential, with future focus on integrating AI with other technologies and ensuring ethical use.

OC195. USE OF CHATGPT BY MEDICAL STUDENTS

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Introduction: The use of artificial intelligence platforms, particularly ChatGPT, has permeated the academic medical field since December 2022. The ChatGPT platform offers students opportunities to solve various common practice problems. The objective of this study is to describe medical students' actual use of ChatGPT.

Methods: A survey was conducted in July 2024 using a Google Forms questionnaire. Medical students from the first, second, and third study cycles were surveyed to understand their usage and knowledge of ChatGPT.

Results: In total 56 students (60.7% female) with an average age of 26.5 years participated in the survey. Third-cycle students were the most frequent (69.6%). The majority of students (85.7%) had not received training in artificial intelligence, but 98.2% were aware of ChatGPT, and 80.4% had used it. Social media was the means through which 73.2% of students discovered ChatGPT. The most common uses of ChatGPT were: answering questions in medical courses (57.8%), conducting bibliographic research (31.1%), and solving medical practice problems (24.4%). The benefits of using this application include ease of use (86.7%) and accessibility (77.8%). The limitations of ChatGPT include error and inaccurate responses (73.3%), the need for secondary verification by the user (62.2%), and a lack of knowledge in certain areas (60%). Regarding the responses to questions assessing basic knowledge about ChatGPT, the average score of students on the tests was 3/6 points.

Conclusion: ChatGPT is frequently used by medical students despite its limitations and lack of knowledge of all its features.

OC196. EVALUATING THE EFFICACY OF AN ARTIFICIAL INTELLIGENCE CHATBOT IN PROVIDING HIGH-QUALITY AND EMPATHETIC RESPONSES TO

PULMONOLOGY-RELATED PATIENT INQUIRIES

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Introduction: The rapid expansion of virtual healthcare has increased patient messages, adding to the workload and burnout of healthcare professionals. Artificial intelligence (AI) assistants could help draft replies for clinicians to review (1). Aim: To evaluate the capability of an AI chatbot (ChatGPT), launched in November 2022, to provide high-quality and empathetic responses to patient questions.

Methods: In this cross-sectional study, a public database from a social media forum (Med. tn) was used to extract 25 pulmonology-related questions previously answered by an independent pulmonologist. The chatbot's responses were generated by entering the original question into a new session, with instructions to respond concisely and relevantly as a pulmonologist. The original question and anonymized, randomly ordered responses from the doctor and chatbot were evaluated by three pulmonology specialists. Evaluators selected "which response was better". They assessed "the quality of information" and "the empathy displayed," with scores ranked on a scale of 1 to 5 and compared between the chatbot and doctors.

Results: Out of 25 questions and responses, evaluators preferred the chatbot's responses in 88% of 75 evaluations. Chatbot responses were longer (79 ± 20 words vs. 39 ± 30 ; $p < 0.001$) and scored higher for information quality (3.92 vs. 2.87 ; $p < 0.001$) and empathy (3.23 vs. 2.07 ; $p < 0.001$).

Conclusion: The chatbot's responses were of better quality and more empathetic than those from the doctors. AI chatbots could reduce clinicians' workload and support more efficient patient management.

OC197. SUICIDE RISK PREDICTION IN MEDICAL STUDENTS USING ARTIFICIAL INTELLIGENCE

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Introduction: Medicine is one of the most demanding university degree courses and mental disorders and suicidal behaviors are more frequent among medical students than is generally recognized. Aim : To develop a model for predicting the risk of suicidal ideation in medical students

Methods: A cross-sectional analytical study was conducted among students at four medical faculties in Tunisia, during October and November 2023. A Google Forms questionnaire was filled. Depression was evaluated using the Beck Depression Inventory (BDI). The variables

of interest were identified by bivariate and multivariate analysis, used to create the artificial intelligence model , then tested and trained using Rapidminer Studio.

Results: We enrolled 578 medical students . The mean age was 21.4 ± 1.88 years with a sex ratio of 0.8. Of the participants, 11.8% suffered from psychiatric disorders, with anxiety disorder (5.5%) and mood disorder (4.2%) being the most common. In addition, 13.3% had used psychoactive substances in their lifetime and 73.9% had a non-substance addiction. According to the BDI, 40.7% suffered from depression, of whom 20.2% had expressed suicidal ideation. The associated variables after multiple binary logistic regression were faculty of origin, addiction to: Internet, online games, food and tobacco, reaching out to the psychological support unit, psychiatric history and percentage of real friends. The Gradient Boosted decision Tree model was selected, with a predictive accuracy of 85.5% for suicidal ideation.

Conclusion: Early detection of suicidal ideation is crucial to preventing suicide attempts. In addition to conventional strategies, the use of AI can be a valuable tool.

OC198. KNOWLEDGE OF ARTIFICIAL INTELLIGENCE AMONG MEDICAL STUDENTS

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Introduction: Artificial Intelligence is increasingly impacting healthcare and medical education. This study investigated knowledge of AI among medical students to identify educational needs regarding AI in medical studies.

Methods: A descriptive cross-sectional study was conducted among medical students at the Salah Azaiez Institute. An online questionnaire was used to evaluate knowledge of AI among Tunisian medical students.

Results: A total of 96 students responded to the questionnaire. The mean age was 29.3 ± 3.6 years, with ages ranging from 23 to 44. The gender ratio was 0.31. The majority of participants were medical residents (76%) from different specialties: 66.7% were in medical specialties, 10.4% in surgical specialties, and 11.5% in radiology. One-third of the students (33.4%) had no prior knowledge about AI, and the majority (82.1%) did not know the differences between deep learning, machine learning, and AI. Additionally, 81.6% had not received any training on the topic. However, the majority (93.4%) of participants reported some knowledge about AI applications or tools in the medical field, especially regarding learning and medical writing. Thus, 84.2% used ChatGPT and 10.5% had some experience with Gemini.

Conclusion: This study highlights a lack of knowledge and

training in AI among healthcare students. The widespread use of ChatGPT and other applications among medical students should be supervised and accompanied by training to mitigate improper use of this technology.

OC199. CRITERIA FOR CHOOSING AN ARTIFICIAL INTELLIGENCE TOOL FOR SCIENTIFIC WRITING

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Introduction: The selection of an artificial intelligence tool for scientific writing is based on several criteria. The tool should help organize thoughts and improve the overall quality of scientific work while allowing researchers to focus on the critical aspects of their work. By considering certain criteria, researchers can effectively utilize AI to enhance their scientific writing process. Aim: To present the criteria for choosing an artificial intelligence tool for scientific writing.

Methods: A literature review was conducted using the bibliographic data search engines PubMed, Web of Science, and Medline. The keywords used were artificial intelligence, medical writing, ethics, and data protection.

Results: The determinants for selecting an AI tool for scientific writing encompass the tool's proficiency in natural language processing, the reliability of data and accuracy of scientific sources, and the preciseness of the generated content. Additional considerations involve usability and user-friendliness, data confidentiality and security, and the associated costs. In the context of ethical considerations, adherence to ethical guidelines during the development and implementation of AI tools is a pivotal aspect to bear in mind during the selection process.

Conclusion: Moreover, the integration of AI into scientific writing tools underscores the significance of upholding academic integrity, promoting ethical and transparent utilization, providing adequate training to researchers, and maintaining a balance between the utility of AI and human expertise.

OC200. EXPLORING LIMITATION OF THE USE OF ARTIFICIAL INTELLIGENCE AMONG PROFESSIONALS OF HEALTHCARE

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Introduction: Artificial intelligence (AI) is revolutionizing the healthcare and medical field. However, the usage of AI presents several limitations. This study explored the boundaries of AI in healthcare from the perspective of professionals.

Methods: A descriptive cross-sectional study was conducted among healthcare professionals at the Salah Azaiez Institute. An anonymous questionnaire was administered, including open-ended questions about the limitations and suggestions for the use of AI in healthcare.

Results: A total of 101 healthcare professionals responded to the questionnaire. The mean age was 29.3 ± 3.6 years, and the gender ratio was 0.31. Insufficient knowledge about AI, reported by 60% of participants, was identified as the principal limitation to its use in medical healthcare. Ethical and privacy concerns and lack of opportunities for learning AI skills were reported by around half (48.4%) of participants. Notably, 46.3% did not receive any AI training during their educational programs, pointing to a significant gap in the current medical curriculum. Furthermore, 43.2% reported inadequate access to AI or the necessary technical equipment. The complexity of AI was cited as an additional limitation, with 15.8% finding it too complicated to integrate AI into their practice. Lastly, 12.6% reported time constraints due to educational commitments. Participants also expressed their concerns about protection measures while using AI.

Conclusion: The study highlights the need for comprehensive AI education and better access to technical resources for healthcare professionals. Integrating AI training into educational programs and providing more opportunities for practical skill development are crucial for effective AI implementation in healthcare.

OC201. PERFORMANCE OF ARTIFICIAL INTELLIGENCE ALGORITHMS IN BREAST CANCER SCREENING: A REVIEW OF LITERATURE 2022-2024

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Introduction: Breast cancer (BC) is the second leading cause of death among women globally. Conventional interpretation of mammography faces challenges such as false positives and negatives resulting in missed diagnosis or unneeded biopsies. Leveraging Artificial Intelligence (AI) may enhance BC screening performance. Aim: To review available literature and describe performance metrics of state-of-the-art algorithms.

Methods: We conducted a comprehensive literature search using PubMed with the Mesh terms: ("Artificial Intelligence"[Mesh]) AND "Early Detection of Cancer"[Mesh] AND "Breast Neoplasms"[Mesh]. We included articles published in English between July 2022 and July 2024, while excluding review articles and studies lacking performance metrics. We used Excel for data entry and Stata-SE-17 software for data analysis.

Results: The search identified 130 articles, with 53 meeting

the inclusion criteria. Model architecture was specified in 81% of the included studies, with Lunit's-INSIGHT-MMG, a commercial Deep Learning (DL) based solution, being the most frequently employed (23%). Performance metrics varied widely between studies, with sensitivity ranging from 35.5% to 98.65% (mean=79.5%±14.5%), specificity from 53.9% to 97.7% (mean=87.1%±11.8%), and Area Under the Curve (AUC) values from 0.59 to 0.99 (mean=0.89±0.08). The best performing model overall was a DL model, particularly a 2D Convolutional Neural Network (CNN) combined with surface-enhanced Raman spectroscopy, with 98.7% sensitivity, 97.7% specificity and 0.99 AUC.

Conclusion: Our review revealed variability in the performance of AI models in BC screening. This may be attributed to differences in quality of datasets, data processing, training methodology and model architecture. CNN models in particular showed high screening performances. Further clinical validation studies are necessary before integration into clinical practice.

OC202. "RESEARCH GAPS" IDENTIFICATION WITH GENERATIVE ARTIFICIAL INTELLIGENCE: A PILOT STUDY

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Introduction: The abundance of scientific literature makes identifying unexplored research questions, and synthesizing the available information difficult. Generative Artificial Intelligence (Gen-AI) tools could be a valuable aid to young researchers in these areas. This study aimed to showcase the contribution of Scopus AI[®] in identifying "Research Gaps" and synthesizing existing knowledge.

Methods: Scopus AI[®], a Gen-AI launched by Elsevier in January 2024, synthesizes Scopus documents published since 2013, providing outputs including "concept maps". We tested three prompts, crafted through consensus among the authors: P1: "Prevalence of type 2 diabetes mellitus in Tunisia", P2: "Relationship between Artificial Intelligence and scientific writing", and P3: "What is the impact of fasting on health". For each prompt, the concept map produced by Scopus AI[®] was explored for its contribution to better-formulating research questions.

Results: For P1, the concept map indicated that the research question is well-studied and saturated, suggesting that further research should focus on longitudinal studies. For P2, the concept map identified a significant gap, particularly noting that the relationship between "radiomics" and "scientific writing" remains largely unexplored. For P3, the concept map pointed to a promising research area on the effects of fasting on mental health, suggesting a fertile ground for future studies.

Conclusion: Scopus AI[®], as well as other generative AI tools, can assist researchers in avoiding redundant studies, refining their research questions, and steering their work towards innovative directions. Training scientists in the utilization of these tools would be essential for fostering effective and revolutionary scientific inquiry.

OC203. PERFORMANCE OF ARTIFICIAL INTELLIGENCE TOOLS (CHATGPT[®]) IN EVALUATING TITLES/ ABSTRACTS OF MEDICAL PUBLICATIONS

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Introduction: Peer-reviewing scientific articles is becoming difficult as reviewers become more and more scarce omitting mistakes in the Title/Abstract sections. Artificial Intelligence (e.g., ChatGPT) could help avoiding these omissions. Aim: Assess the performance of ChatGPT[®] in evaluating Titles/Abstracts of Tunisian articles indexed in MEDLINE in 2024 compared to a manual check.

Methods: Articles published in MEDLINE by Tunisians as first authors during the last week of June 2024 were included in the study. Non-medical articles, those behind a paywall and preprints were excluded from this study. Titles/Abstracts were appraised using ChatGPT-4o then manually according to a checklist composed by 18 iso-weighted criteria (0/1/non-applicable). Articles score using each method was presented by its median and Interquartile Range (IQR). Then median accord score with its IQR were calculated. Using the resulting 162 items, agreement between manual and ChatGPT evaluations was assessed using Cohen's kappa statistic.

Results: Nine articles were published in four Journals with a median CiteScore of 1.1 (IQR= [1.1;4.8]) during the last week of June 2024. Using Manual check, articles had a median score of 13/18 points (IQR= [12;14]). Similarly, using ChatGPT-4o as a review tool yielded a median score of 13/18 points (IQR= [12;14]). The median accord score was 12/18 points (IQR= [12;13]). The agreement between manual and ChatGPT-4o evaluations using Cohen's Kappa was fair ($\kappa=0.33$, 95%CI= [0.20;0.46]).

Conclusion: Current ChatGPT model (ChatGPT-4o)'s performance in evaluating medical Title/Abstracts was fair. Large Language Models' outputs should be manually

checked by experts while awaiting new innovations.

OC204. A FOCUS GROUP STUDY AMONG HEALTHCARE ACADEMIC PARTICIPANTS ABOUT THE USE OF GENERATIVE ARTIFICIAL INTELLIGENCE IN SCIENTIFIC WRITING

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Introduction: Generative Artificial Intelligence (Gen-AI) is increasingly employed in all healthcare fields. While students have shown willingness to adopt Gen-AI for scientific writing, academic supervisors have expressed concerns about its extensive use. Aim: to explore Tunisian healthcare students' and thesis directors' attitudes towards using Gen-AI tools particularly ChatGPT in exercise thesis development.

Methods: A qualitative study was conducted mid-2024 through three Focus Groups each including 10-15 healthcare students and thesis directors from various grades and specialties affiliated with six Tunisian healthcare schools. Every 90-120-minute session was guided by ten semi-structured questions addressing three themes: The extent of ChatGPT use in scientific writing, its determining factors, and its impact. Data were audio-recorded, transcribed, then thematically analyzed using a software.

Results: All the participants reported that the use of ChatGPT in thesis development is increasing accompanied by risks of "plagiarism" and "fake information". The "over-reliance" on this tool might be attributed, according to the participants, to the "vulnerability" of healthcare students stemming from "limited scientific writing skills". Students also highlighted an "informational divide" between themselves and their directors in adopting Gen-AI tools which further exacerbates the misuse. Accordingly, both students and directors stressed the need for "practical trainings" to improve scientific writing performance. Directors also suggested updating thesis guidelines to include AI-generated text detectors.

Conclusion: According to the participants, while Gen-AI tools can assist in scientific writing, concerns about misuse are evident. There is, thus, a need for training and clear guidelines to ensure effective and ethical use of these tools.

OC205. STUDENT PERCEPTIONS OF ARTIFICIAL INTELLIGENCE IN HEALTHCARE

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Introduction: The healthcare field is rapidly moving towards digitalization, with artificial intelligence (AI) playing a central role. This transition is impacting the practices and structures of the healthcare system, which sees AI as one of the opportunities to improve the quality of care. We aimed to describe students' perceptions of AI in the health field at Sousse Higher School of Health Sciences and Techniques.

Methods: We conducted a cross-sectional study among students of Higher School of Health Sciences and Techniques of Sousse, during the 2023-2024 academic year. For data collection, we used a self-administered questionnaire inspired by the literature and administered anonymously to the students.

Results: A total of 381 students at the Higher School of Health Sciences and Technology of Sousse were approached for our study, 286 students participated, giving us a response rate of 83.87%. The average age of the participants was 20.65 ± 1.32 years. The Results of the study reported a high level of overall knowledge about the concept of AI, reaching 77.3% However, only 66.8% correctly defined AI, while 45.1% identified machine learning (ML). The majority of students 71.7% had favorable attitudes regarding the use of AI in healthcare, and many thought AI should be included in the educational curriculum.

Conclusion: The gradual and well-supervised adoption of AI, coupled with adequate training for future healthcare professionals, will maximize the benefits while minimizing the risks, ensuring a future where AI plays a central role in improving healthcare.

OC206. PREDICTING THE RISK OF RECURRENCE IN IDIOPATHIC VENOUS THROMBOEMBOLISM USING AI

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Introduction: Venous thromboembolism (VTE) is one of the top five vascular disorders worldwide. After anticoagulation therapy, deep vein thrombosis (DVT) may re-occur. Several models predict thrombotic events after an acute, spontaneous VTE. This study aimed to use AI tools to determine the risk factors of recurrence in idiopathic unprovoked VTE.

Methods: A retrospective study enrolling VTE patients admitted to the internal medicine department at the

Rabta Hospital between 2000 and 2018. The dataset was cleaned and transformed, addressing missing values and non-normality using logarithmic transformation. Feature engineering and selection were performed using correlation matrix analysis. We chose XGBoost as a classifier.

Results: Among the 131 patients, 113 (86.2%) had venous thrombosis and 21 (16%) had pulmonary embolism, with three patients exhibiting both conditions. Recurrent VTE occurred in 18 patients (13.7%): 14 had one recurrence, two had two recurrences, and one patient had three and four recurrences. Five patients experienced recurrent VTE while on vitamin K antagonists. Correlation matrix analysis identified vena cava localization as a significant risk factor for recurrence. The presence of an initial VTE event significantly increased the likelihood of subsequent events, with a correlation coefficient exceeding 0.8. Hyperleukocytosis, especially with hyperneutrophilia, was associated with potential relapse. Concurrent thrombocytosis, anaemia, and hyperleukocytosis significantly increased the risk of a second DVT episode, with correlation coefficients ranging from 0.6 to 0.8. Classifiers, including XGBoost, effectively predicted these outcomes.

Conclusion: The XGBoost classifier, demonstrated strong predictive performance, highlighting the importance of vena cava localization and hematologic abnormalities in VTE recurrence risk assessment.

OC207. ASSESSMENT OF ORAL CANCER AWARENESS AND PRACTICES AMONG DENTISTS IN TUNISIA: A CROSS-SECTIONAL STUDY

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Introduction: Oral cancer is an increasing global health problem. Its early diagnosis is of great significance. Worldwide studies have assessed dentists' knowledge and practices regarding oral cancer. However, there is lack of available information on this subject in Tunisia. This study aimed to assess the oral cancer knowledge, attitudes, and practices among dentists in Tunisia.

Methods: This was a cross-sectional study. A structured questionnaire was distributed to 350 dentists practicing in Tunisia. Dentists' knowledge about risk factors for oral cancer development, its clinical presentation and their current practices were assessed. The data were analyzed with IBM-SPSS-Statistics-25 program. The study examined associations between their knowledge levels with their gender, seniority, specialties, type of practice and sources of information using the χ^2 test and Fisher's-exact test.

Results: The main Results of the present study indicated that among the 350 participant dentists, there were 255 (72.9%) female and 95 (27.1%) male dentists. Largest number of them identified tobacco (93.4%) and alcohol

consumption (45.4%) as the oral cancer risk factors. Oral medicine university specialists, aged less than 40 years, scored marginally higher in indicating floor of the mouth as the most common site for oral cancer, erythroplakia and leukoplakia most likely to be potentially malignant and squamous cell carcinoma as the most common form of oral cancer.

Conclusion: Dentists take up a big part in oral cancer diagnosis. This study identified gaps in Tunisian dentists' knowledge about oral cancer and highlighted the importance of improving educational Methods in oral cancer detection and prevention.

OC208. EXTRA-NODAL TUBERCULOSIS OF ENT SPHERE

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Introduction: Tuberculosis in the ENT sphere is a common site of tuberculosis, primarily involving lymph nodes. However, extra-nodal forms are not exceptional and can present with diverse symptoms, sometimes complicating diagnosis. We aim to describe the epidemiological, diagnostic and therapeutic features of this pathology.

Methods: Retrospective study from 1999 to 2024, involving 15 patients diagnosed with extra-nodal tuberculosis based on histological examination.

Results: The average age was 22.5 years with predominantly male distribution. Laryngeal tuberculosis was diagnosed in 4 patients, with nasofibroscope showing either congestive or granulomatous changes in the laryngeal mucosa, leukokeratotic lesions, or budding valvular formations. Nasopharyngeal localization was observed in 5 patients, one of whom had disseminated tuberculosis. The pathology also affected the parotid gland (one case), the submandibular gland (one case) with ultrasound showing a collection with calcification of the left gland. Palatine tonsils are affected in other patients. Diagnosis was confirmed through anatomopathological examination of biopsies or excised specimens. Treatment involved antitubercular chemotherapy, initiated after a pre-treatment assessment, with a duration ranging from 7 to 12 months. The progression was favorable in our patients.

Conclusion: Extra-nodal tuberculosis of the ENT sphere is a rare but polymorphic condition. The diagnosis is suspected on clinical and paraclinical data and confirmed through histological examination

OC209. ALZHEIMER'S DISEASE AND PRESBYCUSIS

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Introduction: Alzheimer's disease (AD) is a neurodegenerative disorder involving progressive neuronal degeneration and synaptic destruction. Among the associated disorders, presbycusis is a determining worsening factor, hence the importance of management of presbycusis in AD. Our aim is to study the impact of presbycusis on the evolution of AD, and to investigate the contribution and efficacy of prosthetic management.

Methods: Cross-sectional comparative study from February to May 2024, including 40 patients followed in the neurology department for AD and presenting a hearing loss.

Results: A population of 40 patients was divided into 2 groups. The sex ratio was 0.66. The first group, G1, included 25 subjects without hearing aids, while the second group, G2, included 15 patients with hearing aids. The average age was 75 for G1, and 74.5 for G2. A family history of dementia was present in 72% and 73% of cases respectively. Deafness had been evolving for 5 to 10 years in the majority of G1, whereas it had been progressing for 1 to 4 years in G2. The statistical study showed the presence of significantly greater depression ($p=0.00097$), considerably lower quality of life ($p=0.0074$) and substantially greater caregiver burden in patients in group G1 comparing with G2 ($p=0.0408$).

Conclusion: Deafness is a frequent but underestimated comorbidity in AD. Auditory sensory deprivation accelerates cognitive decline in this population, exacerbating the symptoms of dementia. Hearing aids may play a major role in delaying the onset of dementia and improving quality of life in this population.

OC211. THE IMPACT OF PARENTAL SPEECH THERAPY SUPPORT ON THE OUTCOMES OF COCHLEAR IMPLANTATION IN CHILDREN

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Introduction: Speech-language therapy is a vital support service in cochlear implantation (CI) rehabilitation. Acquiring auditory skills depends on many factors, including parents' involvement in the entire therapeutic process. This study aims to assess the impact of parental involvement in rehabilitation on the linguistic and communicative performance of children with cochlear implants.

Methods: A prospective cross-sectional descriptive study was conducted from February to May 2024. The sample included 24 cochlear-implanted, 24 parents, 24 licensed speech-language pathologists. We specifically designed a parental speech therapy support program. A teaching guide was created to conduct workshops. This was achieved through informational and training sessions using educational activities and written materials, with assessments of their knowledge at the beginning and

during the program. The impact of the support program on the outcomes of CI was evaluated using two standardized tests: CAP (Categories of Auditory Performance) and SIR (Speech Intelligibility Rating).

Results: The average age of the children was 7 years [5-10 years]. 88% of them had profound hearing loss. The proportion of mothers was 71% with an average age of 36 years [30-40 year], 13% of them were illiterate. Children whose parents participated in the support program showed significant improvement in perception in 96% of cases and in expression in 67% of cases. We also noted a significant improvement in parents' knowledge about cochlear implantation.

Conclusion: Parental commitment to the implantation and rehabilitation process significantly influences the outcomes. Therefore, continuous guidance, assistance, and support from cochlear implant (CI) teams are essential.

OC212. HEARING DEVICE ADHERENCE FACTORS IN HEARING AID PATIENTS

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Introduction: Hearing loss (HL) is a major challenge, significantly affecting the quality of life and overall health. Hearing aids (HA) play an essential role as technological solutions. Lack of adherence remains an issue. Our aim is to assess the rate of HA compliance among adults with HL who are equipped with at least one HA, and to investigate factors that may influence HA compliance.

Methods: This 4-month study included patients who are deaf and equipped with at least one monaural or binaural sensorineural HA. The IOI-HA questionnaire used, to assess the relationship between the number of hours AAs were worn and degree of satisfaction.

Results: We included 80 patients, with an average age of 56.8 years with male predominance. The evolutionary duration of deafness was 8.6 years. The majority of deafnesses were acquired (90%). All deafnesses were bilateral, with an average threshold on the right of 69db and 73.2db on the left. Behind-the-ear HA were the most used, and most patients benefited from a high-performance HA. HA compliance was variable, with 45% of patients wearing regularly, 42.5% using for specific activities and 12.5% wearing permanently. The study identified significant factors influencing compliance, including age, socio-professional activity, degree of deafness, type of fitting, HA performance, and age of fitting. The highest IOI-HA score observed among those who wore it for more than 8 hours a day (28.5).

Conclusion: Adherence to HA is essential to ensure constant auditory stimulation, which helps to improve communication and enhance quality of life for people suffering from HL.

OC214. NECROTIZING OTITIS EXTERNA : THE REAL THERAPEUTIC CHALLENGE

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Introduction: Necrotising otitis externa (NOE) is a rare disease. It is an invasive and progressive infection of the external auditory canal and skull base. It affects mostly diabetic, elderly, and immunocompromised individuals. Aims: The aim of this study was to provide an overview of clinical and therapeutic features of necrotizing otitis externa and assess the impact of introducing a dedicated management protocol involving joint care between otorhinolaryngology, endocrinology and infectious disease specialists.

Methods: A retrospective study conducted in our ENT department over a 24-year period (2000-2023), including patients who were treated for (NOE).

Results: A total of 46 cases were included. There were 29 male patients. Patients were often elderly (mean age =66 years) and diabetic. Average consultation delay was 1,4 months. Non-resolving otalgia(100%) was the most clinical manifestation presented. Otoscopic examination showed inflammatory stenosis of the external auditory canal in 91%. Cranial nerve involvement occurred in 20% of all cases, of which seven cases of facial nerve palsy. Pseudomonas aeruginosa was the most isolated microorganism (50%). Fungal pathogens were found in 13 cases. Computed tomography was performed in all cases, showing extratemporal expansion in 16 cases. All patients received dual intravenous antibiotic therapy. Thirteen patients (28%) received additional systemic antifungal treatment. Optimal regulation of blood glucose and local care were performed. The average length of stay was 52 days. Mean follow-up was 9 months. Relapse occurred in 13% of patients.

Conclusion: The management of necrotising otitis externa requires a rigorous approach, involving multidisciplinary teams to optimize patient outcomes.

OC215. MANAGEMENT OF STENSEN DUCT INJURIES: IS IT THAT SIMPLE?

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Introduction: Stensen's duct of the parotid gland is a major duct that drains saliva into the oral cavity. Deep penetrating wounds of the buccal and cheek areas may cause ductal injury, which can lead, if untreated, to serious complications Aim: We aim to share our experience in the management of Stenson's duct injuries focusing on diagnosis, surgical approach and therapeutic Results.

Methods: A retrospective study of five patients with

post-traumatic salivary leakage, managed in our ENT department over 11 years (2012- 2023).

Results: Our study included five patients, 3 men and 2 women. The average age was 29.2 years. All patients were victims of an aggression with a sharp object on the cheek area. Exploratory procedures under general anesthesia were performed in all cases and ductal injury was confirmed using methylene blue retrograde filling technique. Microsurgical anastomosis of the cut-ends of the parotid duct was performed using an arterial catheter in four cases. In one case fibrosis was noted on the proximal end so a neo duct was created. Post operative period was uneventful. The catheter was removed after an average delay of 14 days. A total recovery was noted in all cases.

Conclusion: Injuries involving the transection of the Stensen duct are relatively common and demands meticulous and prompt management to restore ductal continuity and patency. This is crucial to prevent complications such as salivary fistulas.

OC216. ASSESSMENT OF QUALITY OF LIFE (QOL) IN PATIENTS WITH DIFFERENTIATED THYROID CANCER (DTC) FOLLOWING THYROID SURGERY

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Introduction: Differentiated thyroid cancer (DTC) is the predominant pathological type of thyroid cancer. QoL is viewed as an important end point in the evaluation of clinical therapies and interventions. The aims of this study were to analyze the impact of different surgical treatments on QoL in patients with DTC and to evaluate factors correlating with the QoL outcomes.

Methods: A prospective longitudinal study that enrolled patients who underwent thyroid surgery, from April 1, 2022, to March 31, 2023, with DTC histologic diagnosis. Patients were evaluated at 1 month and 12 months following surgery using 3 questionnaires: World Health Organization's Quality of Life-BREF questionnaire (WHOQoL-Bref), Thyroid-Cancer-Specific-Quality-of-Life-Questionnaire (THYCA-QoL) and European-Organization-for-Research-and-Treatment-of-Cancer-Quality-of-Life-Questionnaire version 3.0 (EORTC-C30).

Results: Seventeen patients met inclusion criteria. The mean patient age was 50,29. The study sample included 13 patients who underwent completion thyroidectomy (CT) and 4 patients who had total thyroidectomy (TT). According to WHOQoL-BREF, the overall QoL mean was $2,08 \pm 0,71$ (mean \pm SD) 1 month after surgery and $3,82 \pm 0,84$ 12 months after surgery. Data analysis for THYCA-QoL and EORTC-C30 showed significant difference in patient QoL based on type of surgery at 1 month after surgery ($p=0,013$; $p=0,009$) where patients who underwent CT had better scores than patients who underwent TT, but no significant difference was found at 12 months after surgery ($p=0,428$).

Conclusion: This study concluded that type of surgery performed may affect the short-term QoL but not in the long term. Further studies with larger patient cohorts may be able to identify potential predictive factors for a post-operative improvement in QoL.

OC217. VOCAL OUTCOME ASSESSMENT AFTER THYROID SURGERY

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Introduction: Thyroid surgery is a common surgical operation that is frequently followed by vocal symptoms despite preservation of the recurrent laryngeal nerve (RLN). The aim of this study was to analyze vocal outcomes through endoscopic findings and its impact on patients' quality of life after surgery.

Methods: This prospective longitudinal study enrolled patients who underwent thyroid surgery, from April 1, 2022, to March 31, 2023. All patients underwent laryngoscopy before surgery and one month after surgery. They were evaluated at 1 month postoperatively using the Voice Handicap Index (VHI). The questionnaire consists of 3 subscales (Functional, Physical and Emotional), a score superior to +3.00 was considered as a severe impact on aspects of daily life.

Results: 104 patients met inclusion criteria. The mean patient age was 52.30. The study sample included 48 patients who underwent hemi-thyroidectomy, 38 who had total thyroidectomy and 16 who had completion thyroidectomy. 25.5% patients had postoperative dysphonia, while 74.5% did not. Laryngoscopy 1 month postoperatively was normal for 94 patients and showed that 10 patients had RLN palsy. The mean total VHI score was 0.01 ± 1.27 (mean \pm SD). Seventy-eight patients showed no perception of handicap, while 6 patients showed a severe impact on daily life. The Physical subscale had the greatest contribution. Data analysis did not detect any significant difference in patient scores based on age ($p=0.843$), gender ($p=0.558$), histologic diagnosis ($p=0.554$), or type of surgery ($p=0.533$).

Conclusion: Voice changes are a common complication after thyroidectomy; however, its significance is often overlooked. Nevertheless, voice quality is closely related to quality of life and thus should receive greater attention after thyroidectomy.

OC218. OTOMASTOIDITIS IN CHILDREN: CLINICAL, THERAPEUTIC AND EVOLUTIONARY ASPECTS

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Introduction: Otomastoiditis is a medical and surgical emergency. It can be life-threatening due to the risk of

intra- and extra-cranial complications. Aim : Describe the clinical, therapeutic and evolutionary features of otomastoiditis.

Methods: Descriptive and retrospective study carried out in the Department of Children's Medicine B at the Béchir Hamza Children's Hospital, Tunis, over a 7-year period from January 1st 2017 to December 31st 2023.

Results: Twenty cases were collected. The incidence of the disease was about 2.8 patients per year. The mean age was 36.8 months, with extremes ranging from 4 months to 13 years. Male predominance was noted, with a sex ratio of 1.5. Pneumococcal vaccination was complete for 17 patients. Time to consultation ranged from 1 to 5 days. Fourteen patients received antibiotics and/or anti-inflammatory drugs before admission. Retroauricular swelling, present in 18 patients, was the main reason for consultation, followed by fever in 17 patients and otalgia in 13 patients. The tympanic membrane was pathological in 19 patients. All patients underwent a CT scan of the ear rock and brain which confirmed diagnosis. Parenteral antibiotics were prescribed to all patients. Two patients underwent drainage of a subperiosteal abscess. One patient underwent drainage of a subcutaneous abscess. No mastoidectomy was performed. Favorable outcome was observed for all patients.

Conclusion: Treatment of otomastoiditis primarily relies on intravenous antibiotic therapy. Surgical treatment is rarely indicated and it's reserved for complicated forms.

OC219. ASSESSMENT OF WOMEN SATISFACTION AFTER SIMULATION-BASED TRAINING IN IMPROVING BREAST SELF-EXAMINATION: EXPERIENCE OF REGIONAL HOSPITAL OF JENDOUBA

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Introduction: Breast cancer screening helps detect the disease at an early stage and improve survival. Breast self-examination (BSE) could be an alternative to mammography's screening in under developed countries. The aim of this study was to evaluate the satisfaction of women participating in a simulation-based training in BSE.

Methods: We conducted a quasi-experimental study comparing two groups of women: a group who benefited from a simulation-based training to teach them how to correctly perform BSE and a control group, during the month of October, 2023, at the regional hospital of Jendouba.

Results: We included 42 women who were divided into two groups: 22 women in the simulation group and 20 women in the control group. The average age was 51 years old. A satisfaction survey was distributed to the

22 learners after training in BSE. Eleven learners gave a rating of "very good" to the availability of the trainers and the general appreciation of the training (15 responses). Before the training, the level of knowledge was judged "insufficient" by 9 learners. After the simulation session, 11 learners evaluated their new level of knowledge as "very good" and in 4 cases as "good" (15 responses). At the end, 14 learners were ready to transmit and share the knowledge they learned (22 responses).

Conclusion: Simulation-based training was associated with a better detection of barriers in the practice of BSE, an improvement in women behaviors and skills in screening.

OC220. OCCUPATIONAL ACCIDENTS IN HEAVY VEHICLE AND CONSTRUCTION EQUIPMENT OPERATORS: A CASE SERIES OF 43 INCIDENTS AT A TUNISIAN INSTITUTE

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Introduction: Occupational accidents are a significant concern in occupational health, especially for heavy vehicle and construction equipment operators who face various hazards such as prolonged driving hours, complex maneuvers, adverse weather conditions, and handling heavy loads. This study aims to analyze the profiles and outcomes of occupational accidents among these workers in Tunisia.

Methods: This retrospective study examined occupational accidents among 143 heavy vehicle and construction equipment operators, with 43 experiencing work-related injuries. Data were collected from the Tunisian Occupational Health and Safety Institute between 2013 and 2023.

Results: The study involved exclusively male subjects (n=43), with a mean age of 45.9 years (SD = 7.582). Of these, 56% were heavy vehicle drivers and 42% were construction equipment operators, mainly in the mining sector (91%). Accidents resulted from vehicular collisions (37%), vehicle overturning (23%), falls from equipment (21%), and mechanical malfunctions (5%). The most common injuries included spinal trauma (44%), limb injuries (23%), and craniocerebral trauma (12%), with polytrauma occurring in 30% of cases. Post-accident, 30% of operators were permanently unfit for professional driving, 23% experienced temporary unfitness (3-12 months), 21% returned to work with restrictions, and 26% resumed their original duties without limitations. Common work restrictions included avoiding spinal stress (23%), vibration exposure (19%), and handling heavy loads (14%).

Conclusion: This study highlights the significant occupational injuries faced by heavy vehicle and construction equipment operators, underscoring the need for improved safety measures, ergonomic interventions, and comprehensive health programs to

mitigate risks and enhance injury management in this high-risk industry.

OC221. ASSESSMENT OF HEALTH-RELATED QUALITY OF LIFE IN ASTHMATIC PATIENTS ACCORDING TO EMPLOYMENT STATUS

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Introduction: The aim of this study was to compare the asthma-specific health-related quality of life (HRQoL) of adults with asthma who are working full time to those who have drifted away from active working life because of work disability, unemployment or early retirement.

Methods: This is a cross-sectional study carried out among patients explored and followed in the pulmonology department of the Tahar Sfar teaching Hospital in Mahdia. The respondents were divided into two groups according to their working status and matched according to their age and evolution of asthma. The assessment of patients' HRQoL was carried out by the validated Arabic version of Asthma HRQoL questionnaire (AQLQ).

Results: A total of 172 asthmatic patients was included, with 91 workers patients (Group I) and 81 non workers (Group II). The average age of asthma diagnosis was 27 years \pm 14.36 for working patients vs 34 years \pm 13.42 for non-workers (p=0.002). The non-control of asthma was better in Group I (63%) compared to non-working patients (37.07%) (p=0.009). Asthmatic workers had a higher number of acute exacerbations per year (p=0.015). The quality of life was preserved in the majority of cases (74.4%) with a significant difference between the two groups (p=0.003). The non-adherence to treatment was also a factor which is associated with an impaired HRQoL (p=0.02).

Conclusion: Asthma has a significant impact on both the HRQoL and work productivity of affected individuals. This study identifies several key factors influencing HRQoL outcomes such as age, gender, asthma severity, occupational exposures, and adherence to treatment.

OC222. TELEWORKING AND HEALTH OUTCOMES : A DESCRIPTIVE RETROSPECTIVE STUDY IN TUNISIA

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Introduction: This study aims to investigate the impact of teleworking on occupational health, particularly the prevalence of musculoskeletal disorders (MSDs) and psychosocial risk factors among Tunisian workers during the COVID-19 pandemic.

Methods: A cross-sectional study was conducted from September 2021 to July 2022 using an online adaptation of the INRS "Questionnaire TMS (nouvelle version)". The survey assessed telecommuting characteristics, MSDs, and stress symptoms among Tunisian workers. Descriptive statistics and chi-squared tests were used for data analysis. Ethical approval and informed consent were obtained.

Results: The study included 104 respondents with a mean age of 33.1 ± 7.6 years, 59.6% of whom were female. Back pain was reported by 75% of participants, neck pain by 62.5%, and shoulder pain by 55.7%. Continuous home-based telework was reported by 39.4% of respondents, while 22.1% had intermittent arrangements. Ergonomic concerns were prevalent, with 18.3% reporting insufficient workspace and 25% improper keyboard placement. Laptops were the primary work device for 73.1% of participants. Psychosocial challenges included isolation (54.8%), work-life balance difficulties (36.5%), and reduced professional contact (46.2%). Stress symptoms showed higher scores for cardiovascular problems during telework (9.0) compared to non-telework periods (7.9). Only 26% sought medical consultation for MSDs, with 37% receiving medical treatment and 29.6% undergoing physical rehabilitation. There was a statistically significant correlation between the duration of daily telework and the prevalence of MSDs ($p = 0.046$).

Conclusion: The study highlights the high prevalence of MSDs and psychosocial challenges among Tunisian teleworkers during the pandemic, emphasizing the need for comprehensive occupational health strategies.

OC223. ROAD TRAFFIC FATALITIES IN SFAX, TUNISIA: A STUDY OF 1332 CASES

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Introduction: Death from road traffic accidents (RTAs) is a major public health issue in Tunisia and globally, with severe human, social, and economic consequences. In this context, we studied the sociodemographic and medicolegal data of all deaths that underwent a medicolegal examination for violent death following a road traffic accident (RTA) to propose preventive measures.

Methods: This retrospective study was conducted at the Department of Forensic Medicine at Habib Bourguiba University Hospital in Sfax, Tunisia. It included all RTA-related deaths that underwent forensic examination from January 1, 2016, to December 31, 2023.

Results: We analyzed 1332 RTA-related deaths, accounting for 22.8% of all necropsies during the study period. Most victims were male (84.6%), with an average age of 39.75 years. RTAs predominantly occurred in rural areas (74.8%). Most accidents happened in summer (30.8%), on weekends (33.2%), and between 18:00 and 06:00 (38.9%). The majority of victims were vehicle drivers (61.4%), with 43.6% riding two-wheeled vehicles.

Pedestrians comprised 22.2% of the cases. Two-wheeled vehicle riders were mainly hit by light vehicles (78.3%) and lacked safety equipment in 99.7% of cases. Death occurred at the accident site in 53.9% of cases, while 44.3% of victims were hospitalized, with an average hospitalization duration of 15.8 days. The primary cause of death was polytrauma, with head and thoracic trauma being most common (89.7% and 72.8%, respectively).

Conclusion: RTA-related deaths are frequent and predominantly affecting young male individuals. Current prevention efforts are insufficient. More extensive measures are needed to reduce RTA mortality.

OC224. HEPATITIS B VACCINATION AMONG HEALTH CARE WORKERS: A STUDY AT CHARLES NICOLLE HOSPITAL

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Introduction: Healthcare workers (HCWs) are at high risk of acquiring hepatitis B. In addition, immunisation of HCWs against HBV is still insufficient. In this study, we aimed to determine the hepatitis B vaccination status of HCWs at Charles Nicolle Hospital.

Methods: A cross-sectional descriptive study of health care workers at the Charles Nicolle Hospital who had received at least one dose of hepatitis B vaccine and who belonged to 10 departments selected on the basis of simple random sampling over a two-month period.

Results: During the study period, 599 HCWs were enrolled. The study showed that the population was predominantly female with a sex ratio of 0.34. The mean age was 44.4 ± 10 years. The occupational categories were mainly represented by nurses with 45.4% of cases. Asymptomatic chronic hepatitis B and immunity due to natural infection were found in 4 and 7 cases, respectively. Hepatitis B vaccination was complete in 66.4% of cases, with 322 (53.7%) having received a single dose of vaccine and 76 (12.7%) having received two doses. 188 HCWs (31.3%) were immunised against hepatitis B, including 132 (22%) who had received three doses of vaccine. Of the 201 HCWs with a complete vaccination schedule, 132 (65.7%) were immunised. Adherence was associated with age ($p < 0.001$) and occupational category ($p = 0.02$). The serological profile of HCWs who had received three doses of vaccine was not associated with any of the factors studied.

Conclusion: Post-vaccination serology, combined with a complete vaccination schedule, is the best strategy for preventing viral hepatitis B in HCWs

OC225. EVALUATION OF PATIENT INFORMED

CONSENT PRIOR TO NURSING CARE

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Introduction: The information of the patient is a priority before any diagnostic and therapeutic strategy. The evaluation of this information is necessary to meet new requirements of patients. We aim to assess the quality of informed consent given to the patients prior to nursing care.

Methods: We carried out a prospective, descriptive study, to evaluate the quality of medical information and consent by nurses in the hospital of Mohamed Taher Maamouri of Nabeul, during May 2024.

Results: A total of 61 nurses responded to the survey. The average age was 23.5 years old (24 – 59), and the sex ratio men to women was 2.8:1. The nurses provided information on the nature of the act in 85.8% of cases, the alternatives in 43.4% and the possible side effects of treatments in 67.6%. The information given to patients was perceived as simple in 86.9%, complete in 54.2% and intelligible in 76.3%. The patient had time to reflect in 26.4%. The information was communicated orally in 96.7% and using a drawing in two cases. The patient's consent was obtained in 73.5% of cases. The consent was explicit in 74.3% and implicit in 25.7%. The majority of nurses believed the patient had the right to refuse the care (81.6%).

Conclusion: The content of the information should be revised, in terms of the use of technical words not adapted to the patient, and time to consent. The information must be as complete, precise and intelligible to obtain the informed consent of the patient.

OC226. ASSESSMENT OF PATIENT PERCEPTION ABOUT THE CONSIDERATION OF HUMAN ASPECTS IN HEALTHCARE AT CHARLES NICOLLE UNIVERSITY HOSPITAL

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Introduction: Patient satisfaction is a crucial indicator of healthcare quality, including the consideration of human aspects of care. This study aims to assess the patients' perception about the consideration of human aspects in Healthcare at Charles Nicolle University Hospital.

Methods: A cross-sectional study was conducted at Charles Nicolle University Hospital from February to May 2024. Stratified cluster sampling was used. Data were collected using a self-administered questionnaire designed to assess multiple aspects of patient care. This evaluation includes five items measured using a Likert scale from 0:very bad to 5:excellent: time spent with patients by healthcare staff, responsiveness to patient requests, respect for patient privacy, respect for patient

confidentiality, and the quality of listening and attention. A mean score of each item was given and an overall mean score was calculated after verification of Cronbach's alpha.

Results: A total of 368 patients participated in the study, with a sex ratio (M/F)=0.8. The median age of participants was 43 years [IQR33-60]. The overall calculated mean score for assessing the consideration of the human aspect was 2.8 with a Cronbach's alpha of 0.827. The mean score for each of the five items were as follows: time spent with patients (2.75±0.048), responsiveness to patient requests (2.45±0.04), respect for patient privacy (3.14±0.037), respect for patient confidentiality (2.79±0.041), and quality of listening and attention (2.91±0.53).

Conclusion: Patient satisfaction with the consideration of the human aspect by the hospital staff was above medium. These findings highlight the need to consider soft skills as a priority in initial and continuous training programs.

OC227. FACTORS INFLUENCING PROFESSIONAL RECLASSIFICATION AMONG TEACHERS

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Introduction: Teachers face many demands stemming from their professional duties and work environment, which can potentially impact their physical ability. This study aims to identify the socio-professional characteristics of teachers seeking professional reclassification to administrative roles and determine the reasons for this career transition.

Methods: A descriptive cross-sectional study was conducted at the Occupational Medicine and Professional Pathology Department of Charles Nicolle Hospital in Tunis from October 31, 2022, to December 31, 2022. The study focused on teachers referred for a medical fitness assessment for work.

Results: Out of 104 teachers, 47 (43%) were reassigned to administrative roles. The sex ratio was 3.2, with an average age of 49.83 years and 22.47 years of professional seniority. Seventy-eight percent taught at the elementary level, with an average of 16.09 hours per week. Neurological conditions were present in 17% of reassigned teachers, followed by cancer and psychiatric disorders at 14.9% each, and renal conditions at 10.6%. Gender and marital status were significantly associated with reassignment ($p=0.025$; ORa=0.339; IC 95% [0,13-0.87] and ($p=0.028$; ORa=0.338; IC 95% [0,12-0.89], respectively), but no significant link was found between health conditions and reassignment.

Conclusion: Our study shows significant links between job reassignment, gender, and marital status. The lack of a significant relationship between reassignment and health conditions suggests that reassignment decisions are influenced by factors beyond health issues, such as adaptability and job-specific needs.

OC228. MEASURING NICOTINE DEPENDENCE AMONG A SAMPLE OF TUNISIAN WATERPIPE SMOKERS USING THE SYRIAN CENTER FOR TOBACCO STUDIES (SCTS-13)

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Introduction: Waterpipe smoking (WPS) has gained popularity among young adults worldwide. Tunisia is not spared by this emerging problem. This study aimed to estimate WPS prevalence and to assess the degree of dependence among a sample of Tunisian University Students.

Methods: A cross-sectional study was conducted (2021- 2022) among a sample of Tunisian university students aged between 18-34 years. A web-administered questionnaire was used for data collection, with items related to WPS and age of its initiation. The Syrian Center for Tobacco Studies (SCTS-13) score was used to assess the degree of waterpipe dependence among smokers (13 items).

Results: A total of 89 students(N=210) stated that they were current Waterpipe (WP) smokers, representing a prevalence of 42.4% (95%CI[36.2 – 49.0]). The average age of WTS initiation was 17.8 years ranging from 10 years to 24 years. The mean of STS-13 score was 6.7±5.0 with extremes ranging from 0 to 26. The interquartile range of the score was[2-10]. Eighty percent (80%) stated that it would be very difficult to be in a restaurant and not smoke the waterpipe. And 76% stated that the interruption of their WPS session would be nervous for them.

Conclusion: Alarming prevalence of WPS was reported among our study sample with a considered average of dependence. Adolescents and young adults are prone to develop nicotine dependence which may lead to further tobacco use and associated health risks. Interventions to raise awareness and to limit the extension of this phenomenon among young adults, are needed.

OC236. THE PSYCHOLOGICAL IMPACT OF CHEMOTHERAPY-INDUCED ALOPECIA ON WOMEN

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Introduction: Chemotherapy is widely recognized as one of the most effective treatments against cancer. However, it is also associated with several serious and traumatic side effects, including alopecia. The aim of our work was To study and understand the psychological impact of alopecia on women treated with chemotherapy.

Methods: This was a prospective cross-sectional study

conducted on female patients receiving chemotherapy for cancer at the Hematology Department of Aziza Othmana Hospital from February to April 2024. Data were collected using a preliminary questionnaire and three validated scales to assess distress related to chemotherapy-induced alopecia, self-esteem and depression.

Results: Our study included 30 patients, with an average age of 46 years. Sixty percent of patients suffered from severe chemotherapy-induced alopecia. Half of our population suffers from severe distress. Sixty-three percent of patients had depressive symptoms and 26.7% of them reported experiencing low self-esteem. Severe distress was more frequently observed in certain categories of patients: those in the 45-65 age group, married women, patients with a primary education level, retirees, those with a family income ranging from 1000 to 1800 dinars, those experiencing severe alopecia, and those undergoing chemotherapy. Our study shows no association between the severity of alopecia-related distress and self-esteem.

Conclusion: In the light of our Results, we have deduced that alopecia, or hair loss, is one of the most visible and traumatic side effects of chemotherapy. For many women, this loss affects not only their physical appearance, but also their psychological well-being.

OC237. IDENTIFYING KEY FACTORS OF BURNOUT IN TUNISIAN ONCOLOGY NURSES

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Introduction: Nurses play an essential role in patient care, with the nurse-patient relationship being a fundamental aspect of healthcare delivery. Research indicates that oncology nurses are particularly susceptible to burnout. However, there is limited research on nurse burnout in oncology, especially in the Arab Muslim world. This study aims to investigate burnout among oncology nurses and analyze its association with professional and sociodemographic factors.

Methods: A cross-sectional study was conducted involving oncology nurses from the Salah Azaiz Institute. We assessed socio-demographic data, work variables, job satisfaction, and burnout using the Maslach Burnout Inventory.

Results: Among the nurses surveyed, 78 responded correctly to the questionnaire. The median age of participants was 37 years, with a predominance of females (52.6%). The median duration of work in oncology was 11 years. Regarding job satisfaction, 30.8% were somewhat dissatisfied, and 24.4% were not satisfied. The prevalence of burnout was 89.9%, with 73.1% experiencing high levels of emotional exhaustion,

48.7% high levels of depersonalization, and 25.6% a low level of personal accomplishment. Personal medical and psychiatric history, along with job satisfaction, emerged as the strongest predictors of burnout in the multivariate analysis.

Conclusion: The study highlights a significant prevalence of burnout among nurses in oncology settings. In Tunisia, there is an urgent need to prioritize the psychological well-being of oncology nurses. Preventive strategies should emphasize enhancing working conditions to reduce these risks

OC238. INTERNET ADDICTION AND ANXIETY-DEPRESSIVE DISORDERS IN NURSING STUDENTS

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Introduction: The pervasive influence of digital technologies and social media has reshaped young people's lives, learn, and interact. Unfortunately, excessive engagement with these platforms can contribute to the development of mental health problems. Aim: To assess the level of addiction to social networks and its association with anxiety-depressive disorders in a nursing students in Sousse.

Methods: A cross-sectional analytical study was conducted among nursing students at the Sousse Higher Institute of Nursing during April and May 2024. Social network addiction was assessed using the Smartphone Addiction Scale Short Version, and anxiety-depressive symptoms were measured with the Hospital Anxiety and Depression Scale.

Results: A total of 229 nursing students participated in the study. Mean age was 21.1 years, with a female predominance of 59.4%. Physical activity and involvement in associative life were reported by 34.1% and 61.1% of participants, respectively. The peak time for social network connections was between 10 AM and 8 PM for 34.9% of participants. The average age of initial social network account creation was 12.35 years, with smartphones as the primary access device for 85.6%. The average score on the social networking addiction scale was 30.63. Addiction was reported in 54.1% of cases. Anxiety and depression were reported in 38.4% and 11.8% of cases respectively. A significant association was reported between addiction to social networks and depression ($p=0.023$).

Conclusion: This study highlights the association between social networking addiction and anxiety-depressive symptoms among nursing students. These findings emphasize the need for tailored prevention and intervention programs to safeguard the mental health of this population.

OC240. CONTRIBUTION OF THE QSOFA SCORE IN THE EVALUATION OF SEPSIS IN ELDERLY PATIENTS

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Introduction: Severity scores in sepsis aim to classify patients according to initial severity. Several clinical scores have been developed. The objective is to determine the contribution of qSOFA scores in the assessment of the severity of patients aged over 65 years admitted for sepsis to the emergency room.

Methods: This is a prospective descriptive study taking place over a period of 24 months in the emergency department.

Results: We collected 159 elderly patients hospitalized for sepsis. The average age was 75 years with extremes ranging from 65 to 95 years. The main reasons for consultation were: fever (111; 69.8%), asthenia (110; 69.2%), confusion (35; 11.5%), dyspnea (64; 40.3%), cough (25); 15.7%), urinary signs (24;15%) and digestive signs: abdominal pain (13.8%), vomiting (11.9%) Sepsis severity scores were calculated. The means of qSOFA, NEWS, MEWS and SOFA scores were 2.05, respectively; 7.83; 4.58 and 4.7. The factors associated with a qSOFA score ≥ 2 are: urinary sepsis ($p=0.014$), acute renal failure ($p=0.047$), platelet level ($p=0.014$), creatinine ($p=0.011$).

Conclusion: The q SOFA score appears to be an essential tool in estimating the risk of patients admitted for sepsis.

OC241. COMPARATIVE STUDY OF QSOFA AND NEWS SCORES IN PATIENTS ADMITTED TO THE EMERGENCY ROOM FOR SEPSIS

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Introduction: Severity scores in sepsis aim to classify patients in terms of initial severity. Several scores have been established. The study aims to determine the contribution of qSOFA and NEWS scores in assessing the severity of patients admitted for sepsis.

Methods: A prospective descriptive and single-center study performed in the emergency department. A comparative study between the qSOFA and NEWS scores was carried out.

Results: 305 patients were enrolled. The average age was 62 years with a gender ratio of 1.47. The main reasons for consultation were: fever (209; 68.5%), asthenia (210; 68.9%), confusion (35; 11.5%), dyspnea (120; 39.3%), cough (53); 17.4%), chest pain (22;7.2%), palpitations (199;65.2%), urinary signs (47;15.4%) and digestive signs: abdominal pain (20.7%, vomiting (18.4%), diarrhea (7.9%). The averages of the qSOFA, NEWS, and SOFA scores were respectively 2.2, 7.7 and

4.63. The factors associated with a qSOFA score ≥ 2 are: male gender ($p=0.019$), hypertension ($p=0.016$), chronic renal failure ($p=0.001$), hemodialysis ($p=0.001$), cough ($p=0.001$), confusion ($p=0.05$), urinary infection ($p=0.018$), worsening ($p=0.000$), shock ($p=0.001$), use of norepinephrine ($p=0.001$), multiorgan failure ($p=0.001$), and acute renal failure ($p=0.000$). The factors associated with a qSOFA score ≥ 7 are: Dyspnea ($p=0.000$), confusion ($p=0.025$), pulmonary focus ($p=0.000$), urinary focus ($p=0.011$), shock ($p=0.001$), ARDS ($p=0.003$), multiorgan failure ($p=0.001$) death ($p=0.000$).

Conclusion: The qSOFA and NEWS Score appear to be crucial tools in the classification of sepsis in the emergency room.

OC242. MICROBIAL ASSESSMENT OF OF HEALTHCARE WORKER'S HANDS IN THE OPERATION THEATER

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Introduction: The presence and management of bacterial flora carried by operating room staff is an important factor influencing surgical outcomes, often underestimated. Indeed, hand antisepsis is a critical step in patient care, as direct contact can lead to the cross-transfer of potentially pathogenic microorganisms to surgical sites. This study aimed to analyze the prevalence of microorganisms on the hands of the health care staff of the operation theater at Salah Azaiz Institute.

Methods: This is a descriptive cross-sectional study conducted in february 2024 at the operating room of the surgical department. We performed several sampling from the hands of healthcare staff, including from jewelry and beneath the fingernails. The samples were sent to our microbiology laboratory.

Results: Among the 50 operating room staff members, we collected 29 samples from 20 individuals. Our sample population included 8 doctors, 8 anesthesia technicians, and 4 instrument technicians. Seventy per cent of hand's samples were positive, and the flora identified was polymorphous. In 71.4% of cases, coagulase-negative staphylococcus was isolated, while in the remaining cases, it was found in association with Staphylococcus saprophyticus. For samples taken from objects such as rings and watches, which were all positive, the germs isolated were staphylococcus a coagulase negative and staphylococcus saprophyticus.

Conclusion: This study highlighted several urgent needs in the fight against nosocomial infections. Recommended measures include promoting continuous training for medical and nursing teams, with a particular emphasis on improving handwashing procedures, as well as monitoring indicators of adverse events.

OC243. CARDIOVASCULAR HEALTH AND METABOLIC DISORDERS IN TUNISIAN PROFESSIONAL DRIVERS: PREVALENCE AND OCCUPATIONAL IMPACT

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Introduction: Professional drivers face elevated risks of cardiovascular and metabolic disorders due to their sedentary work environment, irregular schedules, and occupational stress. These health issues can significantly impact their overall fitness for work, making it crucial to understand the prevalence and characteristics of these conditions in this population. To evaluate the prevalence and characteristics of cardiovascular and metabolic disorders among Tunisian professional drivers and assess their impact on occupational fitness.

Methods: A retrospective analysis was conducted on medical records of 133 male professional drivers examined at the Tunisian Occupational Health and Safety Institute from 2013 to 2023. Data on cardiovascular and metabolic conditions were analyzed.

Results: The drivers had a median age of 42 years (IQR: 36-47) and median work experience of 9 years (IQR: 4-16). Most were employed in the mining industry (63%) and transport sectors (29%). Hypertension was the most prevalent cardiovascular condition (13%), with ischemic heart disease affecting 2%. Metabolic disorders included type 2 diabetes (9%) and prediabetes (2%). Dyslipidaemia was present in 8%, and 31% were classified as obese (BMI ≥ 30), with a mean BMI of 28 kg/m². Smoking prevalence was 63%. Electrocardiogram abnormalities were noted in 10%, and elevated cholesterol and triglycerides were found in 19% and 26%, respectively. Temporary or permanent unfitness for work was observed in 53% of cases.

Conclusion: This study reveals a high prevalence of cardiovascular and metabolic disorders among Tunisian professional drivers, significantly impacting their occupational fitness.

OC244. BREAST CANCER PROPORTIONATE MORTALITY IN TUNISIA IN 2020 AND 2021: CAUSES OF DEATH INFORMATION SYSTEM DATA

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Introduction: Breast cancer (BC) is the most diagnosed cancer in the world. It is the leading cause of cancer-related deaths (CRD) in women worldwide. Aim: To describe the changes in BC mortality in the general population as well as in both sexes in Tunisia in 2020 and 2021.

Methods: We used BC mortality data sourced from the

National CDIS. We included all reported BC-related-deaths(BCD) in 2020 and 2021 per the International-Classification-of Diseases-10th-revision(ICD-10):C50 for breast malignant tumors. Data entry and analysis were performed using CSPRO-entry and Stata-SE-17.

Results: CDIS's coverage-rate was 61.2% in 2020 and 71.0% in 2021. BC ranked 14th in 2020 and 13th in 2021 in the general population, 7th in 2020 and 5th in 2021 in women, following COVID-19, cerebro-vascular diseases, diabetes mellitus and ischemic cardiopathy. Among all CRD, BC ranked first in women. The Proportionate Mortality(PM) varied from 1.4%(522BCD) in 2020 to 1.2%(706 BCD) in 2021 in the general population. PM from BC in women was 3.1%(452 BCD) in 2020 and 2.6%(653 BCD) in 2021. PM was 0.36%(70 BCD) in 2020 in men and 0.14%(53 BCD) in 2021. BC ranked 5th in the age-group 15-44(3.6%) and 6th for 45-64(2.9%) in 2021. In 2020, BC ranked 6th and 8th in these age-groups(2.9% and 3.0%).

Conclusion: These Results indicate a considerable PM by BC out of all causes of death especially in young women but also among men in Tunisia, highlighting BC as a major public health problem. Preventive measures should start from a younger age in females and specific measures targeting males should also be implemented to address mortality and minimize healthcare costs.

OC245. CAUSES OF DEATH INFORMATION SYSTEM (CDIS) IN TUNISIA: STATISTICS OF COVID-19 DEATHS IN 2020 AND 2021

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Introduction: The COVID-19 pandemic, emerging in December 2019, caused about 14.2 million excess deaths globally between January 2020 and December 2021 [1]. This study aimed to describe COVID-19 death statistics in Tunisia in 2020-2021.

Methods: Statistics on causes-of-death(COD) collected-passively and actively-by the National Institute of Health(NIH) in the CDIS's framework in 2020 and 2021 were used [2,3]. CDIS's coverage-rate was defined by the number of Medical-Death-Certificates(MDC) received by the NIH compared to deaths recorded by the National Institute of Statistics [4]. The International-Classification-of-Diseases-10th-Revision(ICD-10) was used for COD coding, according to the World-Health-Organization(WHO) guidelines for COVID-19 deaths' certification and coding:U07.1 for COVID-19, virus identified ;U07.2 for COVID-19, virus not identified: clinical-epidemiological diagnosis of COVID-19: probable or presumed case [5]. Data-entry,COD-coding and data-analysis were performed using CSPRO-entry, Iris 5.8.1-software and Stata-SE-17.

Results: CDIS' coverage-rate was 61.2% in 2020 and 71.0% in 2021. COVID-19 was the underlying-COD(UCOD) in 2834 MDCs(6.1%) in 2020 and 18899 MDCs(31.0%) in 2021.

COVID-19 ranked third UCOD in the general population, following diabetes mellitus and cerebro-vascular diseases in 2020 but became first UCOD in 2021. COVID-19 ranked first among men(1506 deaths,6.9%) and third among women(930 deaths,5.1%) in 2020. Meanwhile, COVID-19 ranked first in both men(9610 deaths,30.1%) and women(7793,30.9%) in 2021. COVID-19 ranked fourth in the age-group 15-44(3.3%),second for 45-64(6.8%) and 65-74(8.3%) and third for ≥ 75 years(5.0%) in 2020. In 2021, COVID-19 ranked first in all above age-groups(30.9%,38.4%,38.6%,24.7%).

Conclusion: These findings indicate a substantial rise in COVID-19-related deaths in Tunisia from 2020 to 2021. This highlights the urgent need to strengthen epidemiological surveillance systems for improved preparedness against future health threats.

OC246. KNOWLEDGE, ATTITUDE AND PRACTICE OF PHYSICIANS IN THE KAIROUAN REGION REGARDING TELEMEDICINE

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Introduction: The use of telemedicine will be an integrated part of healthcare systems in most countries as well as in Tunisia. The objective of this study was to determine the knowledge, attitudes, and practices of doctors in the Kairouan region regarding telemedicine.

Methods: This was a descriptive cross-sectional study that took place in the central region of Tunisia over a period of 3 months. All physicians in the central region, practicing in both private and state PUBLIC sectors regardless of their specialty, were included in this study. Data collection was carried out through a self-administered questionnaire using Google forms via email and social media. The data was processed using Excel software.

Results: The response rate was 36% (196/540). The population was predominantly female, 56% (110/96). The average age was 38.9 \pm 10 years. The average length of service EMPLOYMENT was 38.5 \pm 9 years. The majority of respondents (78%) worked in the public sector. Regarding general knowledge about telemedicine, 89.8% of the study population responded "having heard of telemedicine", and regarding the legislative framework, 77.2% reported their ignorance of the presence of a regulatory text for this practice. The majority of participating physicians (61.4%) believe that telemedicine can solve the problem of the shortage of doctors in inland regions. More than half (56.12%) of the respondents reported having used teleconsultation via one of the means available to them.

Conclusion: Telemedecine seems to be one of the solutions to solve the problems of doctor's shortages and to avoid the collapse of the healthcare system during epidemic periods.

OC247. TEACHER WELL-BEING: STUDY OF THE LINK

BETWEEN MENTAL HEALTH AND JOB PERFORMANCE

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Introduction: Psychosocial stress is a significant health risk for teachers, necessitating consistent monitoring as with other occupational hazards. We aimed to examine the psychological challenges encountered by teachers and their negative consequences on their work capacity and overall health.

Methods: A descriptive cross-sectional study was conducted at the Occupational Health and Professional Pathology Department of Charles Nicolle Hospital from October 31, 2022, to February 28, 2023, involving teachers referred for a medical fitness assessment for work. Sociodemographic, professional, and clinical data were collected. After obtaining the teachers' consent, two standardized international questionnaires, namely the validated French version of the Karasek questionnaire and the Work Ability Index, were used to assess occupational stress and workability.

Results: The participation rate was 21% (n: 25). The average age was 45.16 ± 11.42 years, with a sex ratio (M/F) of 0.5. The average seniority was 15.88 ± 11.65 years. Two (2/25) participants had psychiatric disorders. Twenty-five teachers reported low work control (≤ 69) with a mean score of 24.12 ± 5.97 . Work demand (≥ 21) was rated as high by 10 teachers (mean: 20.96 ± 3.14), while 22 teachers reported high social support (≤ 23) from family and colleagues (mean: 27.92 ± 6.25). Job strain was identified in 10 cases, whereas no teacher was in an iso-strain situation. Twenty teachers described their workability as limited.

Conclusion: This study reveals the challenges teachers face and stresses the need for a proactive, tailored approach to manage their health and well-being, ensuring career longevity and educational quality.

OC248. PREVALENCE OF DIABETIC RETINOPATHY AND ITS ASSOCIATED FACTORS IN TUNISIA: A MULTICENTER CROSS-SECTIONAL NATIONAL STUDY IN 2019

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Introduction: Diabetic retinopathy (DR) is the fifth leading cause of visual impairment worldwide. Aim: To estimate DR prevalence in Tunisia among patients with diabetes and describe DR screening and practices in public health facilities.

Methods: A multicenter cross-sectional study was

conducted in 2019 across six Tunisian geographic regions. Twelve centers were randomly selected, targeting one primary-care and one ophthalmology center per region. Patients with diabetes aged ≥ 18 years were randomly sampled and included. Multivariate logistic regression (LR) was performed to identify factors associated with DR.

Results: We included 698 patients with diabetes, with a mean age of 61 ± 12 years and a sex ratio M/F=0.72. During the year prior to the survey, 54.7% did not have any ophthalmic examination. DR prevalence was 29.9%. Among those with DR, 41.8% never had an HbA1C test, and only 9.3% had HbA1C<7%. Patients reported an average wait time of six months for eye care, with inter-regional disparities ($p<0.001$). Most frequent comorbidities were hypertension (64.5%), dyslipidemia (50%) and smoking (37.8%). Multivariate LR identified risk factors for DR: diabetes duration over 10 years (aOR=6.04; 95%CI=[3.06-11.89]), uncontrolled diabetes (aOR=3.35; 95%CI=[1.29-8.68]), delay to first DR screening over two years (aOR=2.81; 95%CI=[1.44-5.5]), absence of at least one yearly ophthalmic exam (aOR=7.86; 95%CI=[3.33-18.57]), transportation constraints (aOR=4.46; 95%CI=[1.97-10.11]), and cost of care (aOR=2.67; 95%CI=[1.23-5.82]).

Conclusion: This study highlighted a high prevalence of DR and inadequate adherence to care standards with interregional disparities. Multidisciplinary efforts and a national eye healthcare strategy are recommended to address this public health issue and socioeconomic disparities.

OC249. WATERPIPE SMOKING PREVALENCE AND ATTITUDE AMONG TUNISIAN UNIVERSITY YOUNG ADULTS

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Introduction: Waterpipe smoking (WPS) has increased, especially among young people living in the Eastern Mediterranean Region. Little information is known about the burden of WPS among Tunisian young adults. This study aimed to estimate prevalence of WPS among a sample of Tunisian university students, and assessing their attitudes toward its use.

Methods: A cross-sectional study was conducted (between July 2021 – January 2022) among a sample of Tunisian university students aged between 18-34 years and residing in Tunisia for at least 5 years. A web-administered questionnaire was used for data collection, with items related to WPS and to assess perception of its health-related hazards.

Results: A total of 89 students stated that they were current Waterpipe (WP) smokers among a total of 210 students, representing a prevalence of 42.4% (95% CI [36.2 – 49.0]). Only sex was significantly associated with WPS (60.5% among men vs. 31.0% among women;

OR=3.4; $p < 10^{-3}$). Among 66 current WP smokers, 14 (21.2%) had no intention to quit use of waterpipe at all. Among 196 respondents, 8.7% stated that WPS is less harmful than cigarettes and 12.8% did not know responding the question. The frequency of WP smokers who believe that WP was less harmful than cigarettes was significantly higher than non-WP smokers (14.7% of smokers vs. 5.0% of non-WP smokers; $p=0.01$).

Conclusion: High prevalence of WPS was reported among our study sample. Interventions to raise awareness and to limit the extension of this phenomenon among university students, are needed using specific policy.

OC250. NURSING AND HEALTH SCIENCES STUDENTS' KNOWLEDGE OF THE SOCIAL DETERMINANTS OF HEALTH

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Introduction: The Social Determinants of Health (SDH) have an influence of up to 80% on Health outcomes. Due to this disproportionate effect, they became a distinct subdomain within Public Health that healthcare professionals need to be educated on in order to be able to participate in addressing them. This study aims to measure the knowledge of health science students regarding SDH and investigate the factors associated with their knowledge scores.

Methods: A Cross-sectional study was conducted among Nursing and Health Sciences Students at Public Institutions in Centre-East region of Tunisia (Sousse and Monastir) from January to March 2024. An electronic questionnaire inspired from literature was distributed via student group chats on Facebook Messenger.

Results: We received 497 responses (response rate of 36.9%) with a mean knowledge score of 13.3 (± 3.7). Four items were answered incorrectly by over 50% of respondents: SDH Definition (74.4%), Housing Conditions (59.2%), Profit Motive (86.7%), and Political Policy (68.8%). However, 73.84% of students correctly recognized the importance of SDH. Significant factors associated with SDH knowledge included political affiliation ($P < 0.001$), media as a prior knowledge source ($P < 0.001$), and the perceived utility of their programs in teaching SDH ($P = 0.04$). No significant differences were found between specialties or years of study. Nearly a quarter of students (22.29%) viewed SDH as "inapplicable to practice."

Conclusion: To address the impact of SDH on health, healthcare professionals need greater awareness. University programs must thoroughly cover SDH, necessitating program overhauls to adequately prepare future professionals.

OC251. PREVALENCE OF WORKPLACE VIOLENCE AGAINST HEALTHCARE WORKERS IN TUNISIA

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Introduction: The aim of this study is to assess the prevalence of workplace violence and its determinants in two teaching hospitals in the central-eastern region of Tunisia.

Methods: We performed a cross-sectional bi-centric study conducted on healthcare workers of two teaching hospitals. A self-administered questionnaire was used to assess the prevalence of workplace violence and its determinants among the workers' socio-demographic and professional characteristics, self-esteem issues and mood disorders.

Results: A total of 546 healthcare workers completed the questionnaire. Of them, 96% reported exposure to at least one violent incident throughout their entire career in public health settings. Non-physical violence (95.8%) was more frequent than physical violence (26.4%). Perpetrators of both physical and non-physical violent incidents were mainly patients, their relatives or visitors (external violence). However, violence perpetrated by colleagues (internal violence) was not uncommon. Miscommunication and limited resources were the three main causes of external violence perceived by the healthcare workers. Multivariate analysis showed that workers aged above 35 years, nurses, doctors and workers with self-esteem issues of worthlessness and helplessness were more likely to be exposed to physical violence. It has also showed that doctors, nurses and technicians were more likely to experience non-physical violence.

Conclusion: Workplace violence is widespread in the central-Eastern region of Tunisia. The study identified determinants of violent incidents in workplace. Thus, targeted preventive strategies should be developed to cope effectively with this phenomenon.

OC253. OCCUPATIONAL RESPIRATORY DISEASES: STATE OF AFFAIRS IN AN OCCUPATIONAL HEALTH CONSULTATION

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Introduction: The incidence of occupational respiratory diseases (RD) continues to rise despite the progress made in workplace safety and health. Our aim is to establish the epidemiological profile of occupational RD in a specialized

consultation for Occupational Health.

Methods: This descriptive retrospective study was based on the records of patients consulting the Occupational Medicine department at Charles Nicole Hospital during the period from January 1st, 2018, to June 31, 2024, for respiratory symptoms and who benefited a declaration of occupational disease.

Results: We recorded 52 patients with a sex ratio of 1. The average age was 45 ± 8 years. The average professional seniority (PS) was 23 ± 7 years, with a PS at the post exceeding ten years in 85% of the cases. The most represented activity sector was the textile industry in 19% of the cases. The most observed occupational respiratory diseases were asthma, rhinitis, and silicosis in 65%, 29%, and 19% of cases, respectively. The declaration referred to 11 tables from the list of compensable occupational diseases. The most mentioned table was Table 28, titled "formaldehyde and its polymers," in 21% of cases.

Conclusion: Thanks to a multidisciplinary approach, integrating expertise in toxicology, epidemiology, and pulmonology, the occupational physician is able to identify the specific risk factors for each profession and propose appropriate preventive measures, which is essential for managing the medico-legal procedures associated with these diseases.

OC254. EVALUATING INFECTION PREVENTION AND CONTROL PRACTICES IN A THIRD-LEVEL HOSPITAL IN TUNISIA THROUGH THE WHO ASSESSMENT FRAMEWORK

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Introduction: Infection prevention and control (IPC) is crucial for patient safety, but it is a neglected area in healthcare facilities across Tunisia. The World Health Organization (WHO) has released various tools to promote IPC. We aim to elucidate the current state of infection prevention and control practices in a university hospital with limited resources in Tunisia to underscore potential areas for improvement.

Methods: An audit was conducted in April 2021 at Ibn Al Jazzar University Hospital. The World Health Organization's Infection Prevention and Control Assessment Framework (IPCAF) was used to assess the strengths and weaknesses of hospital regarding infection prevention and control. The IPCAF follows the eight WHO core components of IPC.

Results: IPCAF score was 322 (of a possible maximum score of 800). Scores were lowest for core components on multimodal strategies for implementation of IPC interventions (Score = 10), and Workload, staffing and bed occupancy (score = 15). Component related to Health care-associated infection (HAI) surveillance had the highest score (score= 57,5).

Conclusion: The total IPCAF score was between 201 and 400 denoting that Infection prevention and control implementation is basic. Significant improvement is

needed particularly regarding multimodal strategies for implementation of IPC intervention, staffing with IPC professionals and other healthcare workers, as well as involvement of relevant stakeholders.

OC255. AUDIT OF HAND HYGIENE COMPLIANCE AMONG HEALTHCARE PROFESSIONALS WORKING AT CHU IBN ELJAZZAR IN KAIROUAN

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Introduction: Hand hygiene is one of the standard precautions for preventing nosocomial infections. In this context, a thorough evaluation of hand hygiene practices must be carried out periodically. The aim was to measure the level of compliance of healthcare professionals at the IBN ELJAZZAR hospital in Kairouan in terms of hand hygiene (HH).

Methods: This was an audit of HH compliance on working days in March-April 2024. The types of HH evaluated were: washing and hydroalcoholic friction. The HH procedure was considered correct if the prerequisites were followed, the indications were respected, and the duration and steps were compliant. Compliance and conformity rates were analyzed.

Results: A total of 1484 opportunities were observed. Of the healthcare professionals audited, 27% were doctors, 53% were paramedical staff and 20% were manual workers. The overall compliance rate was 19.9% (296/1484). Medical staff were the most compliant at HH, with a rate of 22.4%. The most compliant departments were pediatrics (52%), followed by intensive care (47%) and infectious diseases (35%). Hand washing was the most widely observed HH technique (53%). HH compliance rates before and after care were 13% and 30% respectively. A non conformity was found in 70% of cases. This was mainly due to a lack of respect for the duration and steps of the HH procedure. Optimal compliance with prerequisites was noted in 42.5% of cases.

Conclusion: This study helped guide HH intervention strategies in a healthcare facility, identify healthcare professionals' needs and improve compliance to HH.

OC257. EXPLORING SAFETY CULTURE, HAND HYGIENE COMPLIANCE AND HEALTHCARE-ASSOCIATED INFECTIONS IN A TUNISIAN UNIVERSITY HOSPITAL: FINDINGS FROM 2023 STUDIES

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Introduction: Improving hand hygiene (HH) adherence is key to preventing healthcare-associated infections (HCAIs), mainly by enhancing patient safety culture

among healthcare workers (HCWs). We aimed to assess patient safety culture, HH compliance and HCAI rate in Mahdia University Hospital.

Methods: Two cross-sectional studies were conducted in October 2023. First, we evaluated patient safety culture among HCWs of all inpatient units using the validated tool "Hospital Survey On Patient Safety Culture". Second, we assessed simultaneously HH compliance by observational audit and HCAs. Clinical data about HCAI were collected based on notifications from the bacteriology laboratory.

Results: Regarding patient safety culture, 287 HCWs participated with a majority of females (76%) and 34.8% were doctors. All safety culture dimensions were identified as requiring improvement (safety culture level <50%). The highest safety culture level was observed in Teamwork (18.5%). The overall perception of patient safety was higher among participants aged >30 years old (34.9% vs 13%, $p=0.006$) with more than five years of experience (40% vs 19.5%, $p=0.025$). Concerning HH compliance, we observed 111 opportunities with 16.7% of cases exhibiting good HH level specifically in the morning and after patient contact. Half of patients (total of 308) had HCAI (50.3%). Among them, 53% were admitted to Intensive Care Units. The most commonly isolated multidrug-resistant bacteria were *Klebsiella Pneumoniae* and *Acinetobacter* (42.2% and 27.3% respectively).

Conclusion: Given the low levels of safety culture as well as HH adherence and the high prevalence of HCAs, we need to implement effective strategies to enhance the adoption of safety culture among HCWs.

OC258. COVID-19 IMPACT ON HEALTH RISK BEHAVIORS AMONG YOUTH IN TUNISIA: RESULTS FROM A 2020-2023 COMPARATIVE STUDY

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Introduction: The COVID-19 pandemic has resulted in unforeseen changes to people's routines, health, and propensity for sedentary habits, as well as addiction to the internet and gaming. This study aimed to assess how the pandemic influenced risky behaviors among Tunisian adolescents.

Methods: Two cross-sectional studies were conducted before and after the COVID-19 pandemic (in February 2020 and April 2023), among adolescents enrolled in all secondary schools in the region of Mahdia. The validated Arabic versions of the hospital anxiety and depression scale, the Pittsburgh sleep quality index, the Internet addiction test and the Internet gaming disorder-20 test were utilized. Suicidal thoughts, violence and substance use were assessed through a yes or no question.

Results: A total of 3534 participants were included with a mean age of 17 ± 1.5 and a majority of females (68.9%). From 2020 to 2023, we found a decrease in suicidal thoughts (37.4% vs 33%, $p=0.007$), anxiety rates (65% vs 44.8%, $p<0.001$), and sleep disorders (41.4% vs 33.9%,

$p<0.001$). Depression increased after the pandemic (43.7% vs 62.1%, $p<0.001$). Violent behaviors decreased from 55.2% to 35.3% ($p<0.001$). Severe Internet addiction escalated from 7.9% in 2020 to 10.8% in 2023 ($p=0.03$). Compared to 2020, the use of social media and video games rose from 18.8% to 20.3% ($p<0.001$). Hence, obesity increased to 3.2% (versus 1.2% in 2020, $p<0.001$). Regarding substance use, a significant decrease was observed for all substances except e-cigarette smoking.

Conclusion: Our findings emphasize the urgent need to implement preventive measures for promoting youth mental health adapted to the current circumstances.

OC259. EVALUATION OF THE QUALITY OF LIFE OF HEALTHCARE WORKERS AT HABIB THAMEUR HOSPITAL IN TUNIS

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Introduction: Healthcare workers (HCWs) have to cope with heavy workloads, atypical working hours and emotionally stressful situations. All these factors can compromise both their mental and physical health, and consequently their quality of life. Aim: To assess the health-related quality of life (HRQoL) of HCWs at Habib Thameur Hospital.

Methods: A cross-sectional descriptive study which interested HCWs at Habib Thameur Hospital who belonged to 17 departments selected on the basis of simple random sampling over a two-month period. Data were collected via a self-administered questionnaire that included socio-professional characteristics of HCWs and a quality of life assessment based on the SF36 questionnaire in its validated version in dialectal Arabic.

Results: The study included 70 HCWs. The population was predominantly female (65%) with a mean age of 40.57 years old ± 2.1 years. Nurses represented the largest professional category with 32.8% of HCWs. 74.29% of HCW belonged to medical departments. The mean overall quality of life score was 50 ± 3.7 . The mean mental and physical health scores were 49.8 ± 2.8 and 50.3 ± 5.6 respectively. The mean overall quality of life score, the mean mental and the mean physical health scores were not associated with any of the factors studied namely age, sex, professional category and department of assignment.

Conclusion: This study highlights the importance of implementing preventive measures aimed at improving the HRQoL of HCWs by acting on working conditions and reinforcing psychological support for these staff.

OC260. IDENTIFYING TRAINING NEEDS AMONG A TUNISIAN TERTIARY HOSPITAL STAFF

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Introduction: Continuous training is essential for enhancing the hospital staff performance, but its effectiveness varies if it doesn't target the right staff or essential skills. This survey aims to identify the training requirements unique to each professional category at Charles Nicolle Hospital.

Methods: This cross-sectional survey was conducted in March 2023 at Charles Nicolle Hospital in Tunis, involving 184 randomly selected workers, paramedical, and administrative staff. Data were collected using a 34-item questionnaire based on the WHO Hennessey-Hicks toolkit, training needs were assessed in five areas: research/audit, communication and teamwork, clinical tasks, administration, and management. Items were rated on a 7-point scale for importance, current proficiency, preference for organizational change, and training courses. Scores indicated training needs by comparing competency importance and mastery with preferences for training versus change. Participants also specified preferred training areas and evaluated their satisfaction with previous trainings.

Results: Out of 160 participants (85% response rate) at Charles Nicolle Hospital, predominantly female with an average age of 43.1 years and 18.5 years of experience, nearly 9.1% had never received training, and 37.7% were dissatisfied with previous training. Key training needs were computer tool mastery (23.12%) and specialized training (17.5%), including resuscitation (53.57%) and dialysis (14.29%). Paramedicals prioritized research, management, teamwork, and clinical tasks, while administrative staff focused on research and computer skills. Medical workers expressed interest in soft skills and informatics.

Conclusion: This study highlights the importance of a tailored and need based continuous training program, to improve health care workers satisfaction and the ability to retain valued staff.

OC263. IMPACT OF SHIFT WORK ON THE QUALITY OF LIFE OF WORKERS WITH RESPIRATORY DISEASES

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Introduction: Shift work is increasingly common across various sectors, providing greater flexibility to meet production and service demands. However, this work organization can significantly impact worker health and well-being, particularly for those with respiratory diseases who may be more sensitive to environmental factors that exacerbate their existing conditions. This study aims to explore the impact of atypical work schedules on the quality of life (QOL) of workers with respiratory diseases.

Methods: A cross-sectional study was conducted over a two-year period, analyzing the records of patients

working in irregular schedules who consulted our service for occupational fitness assessments. Sociodemographic and occupational characteristics were collected, and participants completed the SF-36 questionnaire to assess their QOL.

Results: The study included 119 employees, with 13 patients (mean age 47±9 years, 2.25 female-to-male ratio) having a history of respiratory conditions, including asthma, chronic obstructive pulmonary disease, obstructive sleep apnea, and bronchopulmonary cancer. These patients were predominantly blue-collar workers (46%) in the healthcare (31%) and electronic cabling (23%) sectors. Regarding work schedules, 46% of employees worked a 3-shift rotation, 31% a 2-shift rotation (morning and afternoon) with a predominant weekly rotation (46%), and 15% had fixed night work. According to the SF-36 questionnaire, the overall mean QOL score was 55±19, with the most impaired domains being social functioning (71±19), bodily pain (64±30), and general health perception (62±16). A significant association was noted between the case of bronchopulmonary cancer and impaired QOL.

Conclusion: These findings highlight the challenges faced by workers with respiratory diseases in adapting to atypical work schedules.

OC265. GRADING OF BREAST CARCINOMAS: MITOTIC INDEX VERSUS PHOSPHOHISTONE H3 (PHH3) ANTIBODIES

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Introduction: The mitotic activity index is considered the most important grading component to predict prognosis in invasive breast carcinoma. However, it is also believed to be a source of discordance in grade estimation based on the Bloom-Richardson system. Therefore, reproducible Methods such as immunohistochemistry (IHC)-based analysis are valuable in facilitating mitotic counts.

Methods: In the present study, we examined the utility of Phosphohistone H3 (PHH3) by IHC in various grades of breast carcinoma and compared it with traditional mitotic counts obtained by hematoxylin and eosin (H&E) staining, as well as the potential impact on tumor grading.

Results: A total of 40 cases of invasive breast carcinoma were evaluated. The mean mitotic counts were 36 and 7 per 10 high-power fields (HPF) in the IHC and H&E groups, respectively. Although the mean average count was higher with the IHC method, a good correlation was observed (R=0.799). Using PHH3 IHC, three cases of grade I tumors were upgraded to grade II, and six cases of grade II tumors were upgraded to grade III. None of the tumors were downgraded.

Conclusion: Consistent with previous studies, we found PHH3 to be a robust, sensitive, and practical marker for mitotic count in breast carcinoma. It is particularly useful for identifying the most proliferative areas. However, further studies are required to confirm the superiority of

this biomarker for inclusion in the grading system.

OC266. SURGICAL MANAGEMENT OF UROGENITAL PROLAPSE

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Introduction: The prevalence of urogenital prolapse (UGP) is steadily increasing. The reasons for consultation are urinary disorders and the sensation of a vaginal bulge. Its treatment remains primarily surgical. The objective of our study was to analyze the anatomical and functional outcomes and evaluate the morbidity of different surgical techniques.

Methods: We conducted a retrospective study over a period of 4 years (January 2020 - December 2023) involving patients who underwent UGP repair. Anatomical success was defined by stage 0 or 1 prolapse after surgery. Functional outcomes were assessed through a questionnaire.

Results: We included 65 patients with an average age of 60.09 years. In our series, 34 patients underwent prolapse repair via laparotomic promontofixation. It was associated with a Burch procedure in 94.11% of cases. Vaginal approach was performed in 31 cases, among which eight patients underwent Richter sacrospinous fixation. For the rest, we opted for the Campbell Crossen technique. For the surgical treatment of stress urinary incontinence by the vaginal route, we used a transobturator suburethral sling in four patients and the Kelly Marion technique in 24 cases. Additionally, hysterectomy was the rule. Morbidity was higher with the abdominal route. Anatomical and functional success rates were 92.8% and 82.1% respectively for laparotomic promontofixation, 87.5% and 100% for sacrospinous fixation, and 82.3% and 76.47% for the triple perineal operation with Campbell Crossen technique.

Conclusion: Promontofixation remains the gold standard for the repair of urogenital prolapse. However, Richter's sacrospinous fixation yields satisfactory Results.

OC273. IMPACT OF URINARY INCONTINENCE ON WOMEN'S SEXUALITY AND QUALITY OF LIFE

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Introduction: Urinary incontinence, characterized by involuntary urine loss, is a current public health issue due to the aging population.. It has a significant impact on physical health and sexuality.

Methods: Our study was a cross-sectional case-control involving 30 patients consulting for urinary incontinence at Service C of the Maternity and Neonatology Center in Tunis from July 2023 to December 2023.

Results: The mean age of our patients was 50 years, with

73.3% having at least one medical history and 20% being diabetic. The average parity was 3.2, with 76.6% being multiparous. The majority (83.3%) had vaginal delivery, with 2 cases of instrumental delivery, and 26.7% had fetal macrosomia. Menopausal women accounted for 67% of patients, and half had a body mass index (BMI) above 30, indicating obesity. Regarding the type of urinary incontinence, 66.7% had stress incontinence, 26.7% had urge incontinence, and 6.7% had mixed incontinence. The symptoms lasted an average of 25 months. Only two patients had consulted a sexologist, while 26 expressed the desire to consult a sexology specialist. The mean ICIQ-UI SF score was 7.83, with 83.3% of patients experiencing moderate discomfort (score between 6 and 12). Urge leaks were the most common symptom, affecting 93.9% of women.

Conclusion: Analyzing these Results, we can conclude that urinary incontinence impacts both physical health, sexual health, and quality of life in women.

OC275. ETHICAL AND DEONTOLOGICAL ISSUES IN THE CARE OF PERSONS DEPRIVED OF THEIR LIBERTY IN EMERGENCY DEPARTMENTS

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Introduction: Persons in police custody or who have been convicted are persons deprived of their liberty because of offences or infractions. Doctors must ensure that they comply with the rules of professional ethics to ensure that they receive the same care as any other person. The aim of this work was to establish an approach to the care of persons deprived of their liberty in accordance with ethical and deontological rules.

Methods: This is a review of the literature relating to ethical and deontological challenges in the medical care of persons deprived of their liberty.

Results: The persons deprived of their liberty may require treatment during the period of arrest or sentencing. Tunisian legislation has guaranteed the rights of persons deprived of their liberty through the various articles of law no. 2001-52 of 14 May 2001. The taking of these persons is governed by ethical rules, citing those of Mandela Rules. The doctor must provide care in accordance with medical ethics. Patients deprived of their liberty must be received alone and unmasked in suitable examination rooms. Verification of identity is essential. Their consent must be obtained at all different stages of care. Doctors must ensure that medical confidentiality is respected and that they are independent facing the detained patients, the prison administration and the judicial authorities.

Conclusion: People deprived of their liberty must receive the same attention and quality of care as any other patient. the doctor must show availability, accuracy and great to respond to the diversity of situations without getting lost.

OC276. SUICIDE AMONG THE ELDERLY: A FIVE-YEAR RETROSPECTIVE STUDY

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Introduction: Suicide among the elderly is increasing, as the population is aging. This phenomenon is always dramatic for both the family and society. Aim To analyse epidemiological and thanatological data related to elderly suicide in northern Tunisia.

Methods: A descriptive retrospective study was conducted including all cases of elderly suicide recorded in the forensic medicine department of Charles Nicolle Hospital in Tunis, from January 2019 to December 2023.

Results: During the study period, we recorded 68 cases of elderly suicide. The average age was 72.8 years, with a sex ratio of 2.7 (50 men/18 women). More than half of the victims (54.4%) had psychiatric histories, with depressive syndrome in 24.3% of the cases. In 13.2% of the cases, the victims had explicitly expressed suicidal ideation, and 17.6% had previously attempted suicide. Suicide occurred predominantly during the summer season in 30.8% of all cases, while the lowest rate was observed during winter. The family home was the most frequent place of suicide, representing 45.6% of the cases. Hanging was the most common method, used in 51.4% of the cases, followed by poisoning (16.2%), suicidal jumping (10.3%), and drowning (8.8%).

Conclusion: Suicide among the elderly remains an under recognized public health issue, requiring urgent multidisciplinary actions for an effective prevention.

OC277. THE CHARACTERISTICS OF INTERPERSONAL ASSAULT DURING THE PERIOD OF CONFINEMENT IN THE SOUTH OF TUNISIA

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Introduction: The rise in violence during the COVID-19 pandemic and subsequent containment measures has raised concerns among experts around the world. Our work aims to study the medical and medico-legal consequences of this violence and to identify the victimological characteristics of the assaults during the period of detention in the southern region of Tunisia.

Methods: This was a retrospective descriptive study of all cases of physical and sexual violence reported to the forensic department of the Habib Bourguiba Hospital, Sfax, during the period of detention in Tunisia (20 March 2020 - 04 May 2020).

Results: Among the 170 consultants of our forensic department in Sfax, we collected 128 victims of violence in the Sfax region. We found a predominance of males (58.6%), with a sex ratio of 1.41 between men and

women, and an average age of 34 years. 48% of the victims were day laborers. Blunt objects accounted for 84% of the weapons used. Physical examination revealed physical lesions in 96%. Sexual assault occurred in 4.7% of the consultants. The median TTD was 7 days. In 20% of the victims, PPD was given.

Conclusion: According to our research, there were fewer consultations for violence throughout the confinement period than there was the previous year. This highlights the importance it is to maintaining preventive resources available by reopening and making care and support services more accessible during periods of crisis.

OC278. EPIDEMIOLOGICAL AND CLINICAL CHARACTERISTICS OF FATAL CARBON MONOXIDE POISONING IN NORTH OF TUNISIA: 15-YEAR STUDY

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Introduction: Fatal carbon monoxide poisoning (CO poisoning) is the leading cause of death from accidental poisoning in the world. It presents different medicolegal issues. The aim of our work was to describe the epidemiological, medical and medicolegal characteristics of fatal CO poisoning in northern Tunisia.

Methods: Our study is descriptive with retrospective data collection including all cases of death caused by CO poisoning for which an autopsy had been performed at the department of legal medicine Charles Nicolle Hospital in Tunis over a 15-year period.

Results: We had collected 489 cases of toxic death. The mean age of our population was 39 ± 19.48 years. The male predominance was 57.5%. The predominance of fatal CO intoxications occurred in winter (62.3%). The individual form predominated. The most common source was the water heater (55.4%). The main form of CO poisoning was accidental in 95.9% of cases. The classic appearance of carmine-red lividity was found in 54% of cases. The measurements of carboxyhemoglobin (HbCO) were performed in 40.7% of cases with a mean blood level of $58.7\% \pm 17.3\%$. An association between HbCO level and age groups ($p=0.004$), with the highest mean level recorded in the 18 to 29 years and 30 to 39 years ($66.5 \pm 14.9\%$ and $60.9 \pm 15.9\%$ respectively).

Conclusion: Intoxication with CO remains a dramatic event for the individual and for society. In view of the various medico-legal problems posed, preventive strategies should be introduced by healthcare providers and implemented by political decision-makers, in the form of mandatory legislation.

OC279. ACCIDENTAL DEATHS IN THE ELDERLY: A RETROSPECTIVE STUDY

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Introduction: As life expectancy increases, vigilance in the elderly is compromised. Consequently, accidental deaths in this population had become a concerning health issue. The aim was to analyse the epidemiological and thanatological features of accidental deaths in the elderly in northern Tunisia .

Methods: A descriptive retrospective study was conducted in the department of legal medicine at Charles Nicole Hospital over a three-year period, from July 1, 2021 to June 30, 2024, including data collected from autopsy records of the deceased aged 65 years and over.

Results: There were 516 identified cases with a male predominance (sex ratio=2.66). The average age of the victims was 75.27 years, with ages ranging from 65 to 105 years old. Seasonal variation was observed, with a higher incidence in winter (26.2%). The main causes of death were road accidents, representing 54.6% of cases, of which 52.9% were traffic accidents including predominantly pedestrians (67.4%). Domestic accidents came second, accounting for 40.5% of accidental deaths, with a predominance of falls (61.2%) followed by thermal burns (24.9%).

Conclusion: Our Results highlight the importance of implementing targeted prevention strategies to reduce the number of accidental deaths among the elderly.

OC280. THE USE OF THE INTERNATIONAL CLASSIFICATION OF DISEASES IN FORENSIC MEDICINE

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Introduction: The eleventh revision for the International Classification of Diseases (ICD) released in 2022 added a new range of codes, with a new post-coordination system. We aim to compare causes of death in children between 2015 and 2021 using ICD-10 and ICD-11.

Methods: In this retrospective study, we included autopsy cases of children aged 18 and under, in Charles Nicolle's Hospital Legal Medicine Department, from January first to June thirtieth of 2015 and 2021. 2015 causes of death were categorized using ICD-10, while ICD-11 was used for 2021 cases.

Results: We recorded 113 deaths, 73.4% of which were in 2015, and 26.5% in 2021. In 2015, ages between 15 and 18 represented 31.2% of all children deaths, and ages from one to four represented 26.5%. In 2021, ages between 15 to 18 were dominant, accounting for 56.7% of all cases. Using ICD-10 to categorize the 2015 data, the most frequent codes were "P96.0: Acute respiratory failure" at 13.2%, "T06.8: injuries involving multiple body regions" at 12%, and "W69: Drowning and submersion while in natural water" at 8.4%. In 2021, and using ICD-11, "PA03: Unintentional land transport traffic event injuring

a motorcyclist" and "PA90: Unintentional drowning or submersion, while in body of water" were the most frequent causes of death, accounting for 16.66% each. The post-coordination system helped further detail 17 cases in 2021.

Conclusion: The transition from ICD-10 to ICD-11 provided notable advantages, including an expanded collection of codes and a thorough post-coordination system. These additions improved the accuracy for categorizing causes of death in forensics.

OC281. FATAL CARBON MONOXIDE POISONING IN THE SFAX REGION, TUNISIA

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Introduction: Carbon monoxide (CO) poisoning remains the leading cause of toxic mortality in the world and also in Tunisia. This study aims to describe the epidemiological profile and thanatological characteristics of fatal CO poisonings in the Sfax region and to identify preventive measures.

Methods: This is a retrospective descriptive study of all cases of fatal CO poisoning collected at the forensic medicine department of the Habib Bourguiba Hospital in Sfax from 1 January 2011 to 31 December 2023.

Results: We collected 72 cases of death secondary to CO poisoning. The average age of the victims was 35 years and 4 months with a standard deviation of 8 years. There is a male predominance in 62.5% of cases. Poisonings occurred in winter (61.1%), at home (94.4%) and in workplaces (2.43%). The medico-legal form was accidental in all cases. The intoxication was collective in 46% of cases. The source of CO was mainly the defective water heater often placed in poorly ventilated places (51%), followed by the brazier (31%). The classic appearance of carmine-red lividities was found in the majority of cases (91.7%). The average blood HbCO level was 51.59% [15.30%-76%].

Conclusion: Fatal CO poisoning persists as a public health problem in Tunisia. Currently, there are no statistics at the national level on the incidence of this type of poisoning in Tunisia. The creation of a national registry and the mandatory reporting of all cases of poisoning could help prevent and reduce its incidence.

OC282. EVALUATION OF INITIAL MEDICAL CERTIFICATES IN THE CASE OF ROAD ACCIDENTS

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Introduction: Initial Medical Certificates (IMCs) play a crucial role in road traffic accident cases, providing essential medical information to protect victims and

ensure justice. Their accuracy and reliability are vital for fair legal outcomes. This study aims to evaluate the quality of IMCs related to road traffic accidents by identifying gaps and discrepancies between treating physicians and forensic experts. The goal is to formulate recommendations for improving the drafting of these certificates.

Methods: We examined 396 IMCs associated with road traffic accidents to assess their quality. Our analysis was divided into two parts: the first focused on the form and content parameters of the IMCs, while the second used analysis of variance (ANOVA) and Student's t-tests to evaluate the influence of medical specialty and practice sector on IMC quality.

Results: In the descriptive analysis, most IMCs mentioned the physician's name (97.72%), but only 8.8% included their registration number. Patient information, such as age (71%) and official identification number (32%), was sometimes omitted. In the analytical part, 30 IMCs showed discrepancies with forensic findings. ANOVA indicated that hospital-university specialists performed best, and the Student's t-test confirmed that specialty significantly impacted IMC quality, while practice sector did not.

Conclusion: This study highlights shortcomings in drafting IMCs for road traffic accidents, including omissions of essential information. Standardization efforts are necessary to improve IMC quality and better serve victims and authorities.

OC283. DOMESTIC ELECTROCUTIONS IN THE REGION OF CAP BON

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Introduction: Electrical burns are associated with significant morbidity and mortality. The epidemiological characteristics of domestic electrocutions remain insufficiently studied in the region of North Africa, including Tunisia. We aim to investigate the sociodemographic data of domestic electrocutions, clinical characteristics and the pattern of injuries.

Methods: This is a retrospective descriptive study of all cases of domestic electrocution, autopsied at the department of legal medicine of the Mohamed Taher Maamouri Hospital of Nabeul, from January 2014 to December 2023.

Results: During the study period, a total of 89 electrocution fatalities were collected, out of which 54 were domestic, 34.1% of cases. All the victims were men. The mean age of the victims was 37.6±11 years. The electrocutions occurred most frequently during summer (37.1%). All the electrical fatalities were accidental in origin, with no suicide or homicide. The death resulted from low voltage injuries in the majority of cases (87%). The electrocution was caused by faulty appliances in 61.1%, electrical fittings in 26% and bear wires in 13%. An electric mark or burns were found in 72.2% of cases. Entry lesions

were localized on the upper extremities in the majority of these cases (77.7%), the chest wall in 14.8% and the lower extremities in 11.1%. Associated traumatic injuries were seen in 25.9% of cases.

Conclusion: Domestic electrocutions by accidental exposure to electricity are largely preventable. The adoption of proper safety measures and raising awareness about electrical safety are important factors required for the prevention of fatal electrocutions at home.

OC284. THE VALUE OF SHOCK INDEX IN PREDICTING MORTALITY IN EMERGENCY DEPARTMENT PATIENTS WITH CARDIOVASCULAR DISEASES

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Introduction: Cardiovascular diseases are the leading cause of death worldwide. The shock index has proven useful in predicting mortality in other conditions such as trauma and sepsis." The objective of our study was to assess the value of its use by the triage nurse as an indicator associated with mortality in patients suffering from cardiovascular diseases.

Methods: This is a prospective descriptive study conducted over four months, including patients admitted to the emergency department of Mahmoud el Matri Hospital for cardiovascular conditions. The Shock Index (SI) was calculated using the formula: HR/SBP. These values were analyzed using the ROC curve to determine the value that predicts in-hospital mortality with high specificity. Patients with traumatic or surgical problems were not included.

Results: We collected data on 93 patients. The average age was 62±12 years. Forty-seven Patients 50% were hypertensive, 37.6% were diabetic, and 35.5% had heart disease. The mortality rate was 5.4%. An SI > 0.8 was found in 35 patients, with a significant association with the presence of arrhythmias (p< 0.001), heart rate (p<0.001), and mortality (p = 0.003). The area under the ROC curve was 0.88 (0.809 - 0.905], p = 0.04.

Conclusion: the shock index could serve as a severity prediction tool for the triage nurse to enhance and expedite patient care.

OC285. EVALUATION OF CARDIOPULMONARY ARREST SKILLS IN PARAMEDICAL STAFF: PROCEDURAL SIMULATION TRAINING

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Introduction: Unexpected cardiopulmonary arrest

(CPA) in adults remains a major public health issue. The prognosis of CPA is closely linked to the speed with which bystanders initiate external cardiac massage (ECM), and to the quality of its execution. Procedural simulation on a mannequin is the ideal means of acquiring these technical skills. The objective was to evaluate the knowledge and skills of para-medical staff in resuscitation before and after mannequin simulation training based on ERC 2021 guidelines.

Methods: We conducted a prospective observational descriptive study that included para-medical staff. The study period was January and March 2023. Procedural simulation training on a mannequin was organized over two sessions with a pre-test and a post-test each time. We compared means on paired samples using Student's T-test.

Results: Thirty-one of the healthcare staff participated voluntarily in this work. The mean age was 38 ± 11 years, with a sex ratio of 0.4. Average seniority was 13 ± 9 years. The study showed a significant recognition of signs of RCA ($p=0.017$), improved assessment of breathing ($p=0.032$) and better adherence to ERC recommendations in the post-test, especially regarding the depth of chest compression. Pre-test assessment Results showed a mean of 2.56 ± 0.9 . Reassessment after simulation training showed that the overall mean had risen to 4.45 ± 0.9 . The percentage improvement between pre- and post-training scores was 40.66%. The difference between grades before and after the mannequin simulation session, was statistically significant ($p < 0.0001$).

Conclusion: Procedural simulation has become an essential tool in healthcare training. In particular, the use of mannequins during training promotes the knowledge acquisition process.

OC286. FUNCTIONAL NEUROLOGICAL DISORDER IN THE EMERGENCY DEPARTMENT: EPIDEMIOLOGICAL AND CLINICAL CHARACTERISTICS

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Introduction: Functional Neurological Disorder (FND) is a common reason for emergency department visits in Tunisia, yet specific epidemiological data are limited in Tunisian literature. The objective is to describe the epidemiological and clinical profile of FND patients in emergency settings and to determine the presence of underlying psychiatric disorders to reduce recurrent emergency visits.

Methods: Prospective, cross-sectional and descriptive study was conducted over 9 months in emergency department. Adults diagnosed with FND according to DSM-5 criteria were included. Emergency physicians

completed data collection forms. A follow-up phone call at 3 months post-visit assessed underlying psychiatric disorders.

Results: The study included 164 patients with FND. Patients had a mean age of 30 ± 10 years. Women represented 77% of the sample. Most patients were single (60%), employed (52%), and had a university education (44%). Somatic history included hypertension (8%), functional gastrointestinal disorders (6%), neurological pathologies (4%), and anemia (4%). Psychiatric history revealed depression and generalized anxiety disorder predominance. Fifty-seven percent reported previous episodes, with conflict (48%) and stress (45%) being major triggers. Symptomatology included chest tightness (40%), non-epileptic psychogenic seizures (32%), and sensory disturbances (28%). Histrionic personality traits were noted in 13% of cases. Non-pharmacological management (rest/counseling) was applied to 57% of patients, and 28 were referred for psychiatric consultation. Follow-up identified underlying psychiatric disorders in 17 out of 82 patients. Multivariate analysis identified psychiatric history, psychiatric referral, and more than 2 recurrent episodes as associated factors.

Conclusion: FND is prevalent among emergency department patients in Tunisia, particularly among young unmarried women

OC288. DIAGNOSTIC VALUE OF THE STONE SCORE IN THE EMERGENCY DEPARTMENT

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Introduction: Several scores have been developed to facilitate diagnosis and management of renal colic. A high STONE predicts a lithiasis origin of the pain. The objective of this study was to evaluate the performance of the STONE score in the diagnosis of urinary lithiasis

Methods: We conducted a monocentric prospective study (2022-2023), we included patients who consult for simple renal colic with calculation of the STONE score and collection of clinical biological data and radiological explorations. The diagnosis was based on the clinical judgment.

Results: We included 150 patients. The mean age was 46 ± 15 years. The gender ratio=1,11. Eighty-two patients had urinary lithiasis. Comparison of the two groups (labelled urinary lithiasis versus (vs). no urinary lithiasis) showed the following Results: Male gender: 53(64.63%) vs. 26(38%); $p=0.001$, Duration of pain<6h: 66(80.48%) vs. 40(58.82%); $p=0.003$, Continuous pain: 65(79.26%) vs. 44(64.7%); $p=0.03$, Active smoking: 31(37.8%) vs. 15(22.05%); $p=0.028$, Nausea: 21(25.6%) vs. 7(10,29%); $p < 0,013$, Microscopic haematuria: 76(50,66%) vs. 47(69,11%); $p < 0,0001$. The mean STONE score: 10.31 ± 2.4 vs. 7.54 ± 3.5 ; $p < 0.001$. The diagnostic performance of the STONE score was satisfactory with an area under

the curve: AUC=0.797, CI95% [0.723 - 0.871] and $p < 0.0001$. Sensitivity, specificity, positive predictive value and negative predictive value were 82, 72, 78 and 77% respectively. Youden index=0.54

Conclusion: The STONE score showed good performance in predicting the lithiasis of simple renal colic

OC290. FACTORS ASSOCIATED WITH THE USE OF NON-INVASIVE VENTILATION IN ACUTE HEART FAILURE IN PREHOSPITAL

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Introduction: Acute heart failure is a common reason for pre-hospital intervention and hospitalization in the emergency room. Its incidence is clearly increasing and morbidity and mortality is high. The aim of the study is to identify factors of non-invasive ventilation in prehospital.

Methods: Prospective, descriptive study extending over a period of 4 months at the emergency medical aid service. Inclusion of 50 patients transferred by SMUR for acute heart failure.

Results: We collected 50 patients diagnosed with acute heart failure in pre-hospital. The average age was 70 years \pm 13 years with extremes ranging from 32 to 95 years. A slight female predominance was found (58%) with a gender ratio of 0.72. The main pathologies: hypertension (76%), diabetes (58%), dyslipidemia (22%), coronary artery insufficiency (32%), heart failure (28%). The main symptoms were: dyspnoea (96%); orthopnoea (52%) and chest pain (20%). The clinical examination found a mean SBP 159 mmHg, and a mean DBP at 87 mmHg. Oxygen therapy was delivered by: Simple face mask (22%), High concentration mask (52%), non-invasive ventilation (16; 32%): CPAP (22%) and VS-AI-PEP (10%). The factors associated with the use of non-invasive ventilation were: atrial fibrillation ($p=0.043$), coronary artery failure ($p=0.009$), SpO₂ ($p=0.023$), heart rate ($p=0.05$), and high-concentration oxygen therapy ($p=0.044$)

Conclusion: In pre-hospital, as in the emergency room, decompensated acute heart failure is frequent. Optimal pre-hospital management and early use of ventilatory supports improve the course and prognosis.

OC291. PREDICTIVE FACTORS FOR MORTALITY FROM EPILEPTIC SEIZURES IN EMERGENCY DEPARTMENTS

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Introduction: Epileptic seizures present significant morbidity and mortality. Various factors can influence the prognosis of patients. Identifying these predictive factors of mortality is essential to optimize care and improve clinical Results. To determine the predictive factors of mortality in patients admitted to the emergency room

for epileptic seizures.

Methods: This was a prospective single-center observational study conducted in the emergency department over a period of one year. Inclusion of all patients admitted to the emergency room for epileptic seizures. Individualization of two groups: death (+) and death (-).

Results: One hundred and seventy-four patients were included. The mean age was 52 ± 18 years. A male predominance was noted with a gender ratio of 2.7. Forty-eight patients (27.6%) were smokers and 34 (19.5%) were alcoholics. History (%): Epilepsy (38%), Diabetes (23.6%), high blood pressure (23.6%). The majority of seizures were generalized with motor signs (68.4%). Seventy patients (58.3%) presented with status epilepticus and 54 (31%) had a single seizure. Etiologies (%): vascular causes (26.4%), poor treatment compliance (16.4%), intracranial infection (14.5%), traumatic (8.5%) and metabolic causes (7.9%). The evolution was favourable with a return to normal consciousness in 71.8% of cases. Fifteen patients (8.6%) died, three of whom died on admission. The analysis of mortality factors was age: $p=0.047$, OR=1.04, 95% CI = [1-1.08] and use of mechanical ventilation: $p=0.009$, OR=4.9, 95% CI = [1.5-16.5].

Conclusion: Age and use of mechanical ventilation represent predictive factors allowing more rapid identification of patients at high risk of death in patients admitted to the emergency room for epilepsy.

OC293. SEIZURES IN THE EMERGENCY DEPARTMENT: SPECIFICITIES IN EPILEPTIC PATIENTS

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Introduction: Seizure is a common medical crisis in emergency departments with morbidity and mortality depending on the underlying cause. Study the epidemiological-clinical characteristics of epileptic patients admitted to the emergency room.

Methods: A single-center prospective study included patients aged ≥ 15 years with seizures, divided into epileptic (G1) and non-epileptic (G2) groups.

Results: One hundred and seventy-four were included, G1 (n=66, 38%), G2 (n=108, 62%). Average age: G1: 48 ± 17 years vs G2: 53 ± 19 years ($p=0.4$); Gender ratio=3 in G1 and 2.5 in G2 ($p=0.5$). Habits and medical history: Smokers (G1 15.2% vs G2 35.2%, $p=0.004$), Alcoholism (G1 10.6% vs G2 25%, $p=0.02$), Diabetes (G1 15.2% vs G2 28.7%, $p=0.04$), High blood pressure (G1 18.2% vs G2 26.2%, $p=0.22$), stroke: 10.5% (Group 1) vs 8.3% (Group 2, $p=0.6$) Seizures characteristics: Generalized with motor signs (G1 72.7% vs G2 80.5%, $p=0.23$), Status epilepticus (G1 53% vs G2 32.4%, $p=0.007$). Etiologies: Ischemic stroke (G1 10.6% vs G2 14.8%, $p=0.42$); Hemorrhagic stroke (G1 4.5% vs G2 11.2%, $p=0.13$); head trauma (G1 10.6% vs G2 6.5%, $p=0.33$); poor compliance with treatment (G1 39.4% vs G2 0.9%, $p<0.001$). Evolution: Home release (G1 33.3% vs G2 20.4%, $p=0.06$); Death rate: (G1 9.1%

vs G2 8.3%, $p=0.86$). Multivariate analysis of factors associated with seizures in epileptic patients showed: Higher risk in men ($p=0.037$, $OR=3$, $CI95\%$ [1-8]); poor compliance with treatment ($p<0.001$, $OR=82,7$, $CI95\%$ [10-674]) and etiology of head trauma ($p=0.034$, $OR=3,7$, $CI95\%$ [1.1-12.6])

Conclusion: The study highlights seizure characteristics and causes in epileptic patients, emphasizing the need for in-depth assessment to improve management.

OC294. RISK FACTORS FOR POST-INJECTION NEPHROTOXICITY OF IODINATED CONTRAST AGENTS IN THE EMERGENCY DEPARTMENT

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Introduction: Post-injection nephrotoxicity of iodinated contrast agent is a frequent iatrogenic complication in the emergency department and its occurrence is favored by several risk factors. Aim : To study the risk factors for post-injection nephrotoxicity of iodinated contrast agent in the emergency department.

Methods: This was a prospective, descriptive, single-center study over 4 months. Patients aged over 14 years and had undergone an injection of iodinated DCP for diagnostic or therapeutic purposes in the emergency department were included. The diagnosis of post-injection nephrotoxicity of iodinated contrast medium was considered as an increase in creatinine level of 44 $\mu\text{mol/l}$ within 48 to 72 hours after the injection.

Results: One hundred-thirty-three patients were included with a mean age of 50 ± 19 years. The gender ratio (M/F) was 2.8. The risk factors for post-injection nephrotoxicity of DCP were either related to patient or to the injection procedure. The incidence of NPDCI was 14.3% ($n=19$). Univariate analysis showed that advanced age ($p=0.05$), chronic renal failure ($p=0.041$), hypertension ($p=0.005$), chronic anemia ($p=0.019$), elevated urea ($p=0.005$), increased CRP ($p=0.002$), and the amount of DCP $> 90\text{mL}$ ($p=0.005$) were predictive of DCP nephrotoxicity with a statistically significant difference. In the multivariate analysis, the independent risk factors of nephrotoxicity to iodinated PDCs in the emergency department were: chronic anemia ($p=0.034$, $OR=4.47$), chronic renal failure ($p=0.041$, $OR=3.28$), use of anticoagulants ($p=0.045$, $OR=3.9$) and quantity of PDCs $>90\text{ml}$ ($p=0.005$, $OR=2.8$).

Conclusion: The incidence of post-injection nephrotoxicity of iodinated PDC depends mainly on risk factors related to the patient and the procedure of injection.

OC295. ACUTE POISONINGS IN THE EMERGENCY DEPARTMENT: EPIDEMIOLOGICAL-CLINICAL, ETIOLOGICAL AND PROGRESSIVE PROFILES

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Introduction: Acute poisonings are a frequent reason for consultation in the emergency department; the etiologies are multiple and the severity is variable. Objective : Describe the different epidemiological, clinical, paraclinical, therapeutic and evolving characteristics of patients admitted for acute poisoning

Methods: This is a single-center retrospective descriptive study which took place over a period of six months in the emergency department. Inclusion criteria: Age over 18, both genders Non-inclusion criteria: Patients admitted in cardiorespiratory arrest, escaped patients, incomplete files The diagnosis of acute poisoning is retained based on anamnestic, clinical and paraclinical arguments.

Results: Forty-seven patients were collected; mean age (years) = 33.1 ± 12 [16-63]. gender -ratio= 1.13; psychiatric history ($n=1$; 2.1%); drug abuse ($n=5$; 10.6%); history of IOT ($n=2$; 4.3%); accidental poisoning ($n=28$; 59.6%); voluntary intoxication ($n=19$; 40.4%); drug poisoning ($n=9$; 19.1%); CO poisoning ($n=27$; 57.4%); medicinal plant ($n=1$; 2.1%); caustic products ($n=4$; 8.5%); alcohol poisoning ($n=3$; 6.4%); AEC ($n=14$; 29.8%); seizure ($n=4$; 8.5%); discomfort ($n=13$; 27.7%); Mean HR (bpm) = 89.2 ± 17.2 ; mean FR (cyc/min) = 18.6 ± 3.7 ; Mean PH = 7.41 ± 0.07 ; HCO₃- average (IU/L) = 22.2 ± 4.3 ; mean serum sodium (mmol/L)= 137.6 ± 4.2 ; positive toxic balance ($n=10$; 21.3%); rehydration ($n=14$; 29.8%); vasoactive amines ($n=2$; 4.3%); MHC ($n=27$; 57.4%); IOT ($n=5$; 10.6%); rhythm and conduction disorders ($n=2$; 4.3%); dialysis ($n=2$; 4.3%); improvement ($n=40$; 85.1%); length of stay (d)=2; death ($n=1$; 2.1%).

Conclusion: Acute poisoning is the pathology of young subjects, most often it is accidental, the major etiology is CO poisoning and the evolution in the majority of cases is favorable.

OC296. PATHOLOGIES LINKED TO EXTREME HEAT IN THE EMERGENCY DEPARTMENT: PREDICTIVE FACTORS OF MORTALITY

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Introduction: Pathologies linked to extreme heat are seasonal and epidemic diseases in our country. These pathologies can manifest themselves from simple symptoms to life-threatening distress. Objective : Determine the risk factors for mortality of pathologies linked to extreme heat in patients admitted to the emergency department

Methods: This is a single-center prospective descriptive study which took place over the period of July 2023 in the emergency department. Inclusion criteria: Age over 18, both genders Non-inclusion criteria: Patients admitted in cardiorespiratory arrest, pregnant women We individualized two groups according to mortality in the emergency department: a non-death group versus a death group.

Results: Fifty-one patients were collected; non-death group ($n=29$; 56.8%) and a death group ($n=22$; 43.1%);

mean age (years) (69±12.4 VS 67.5±9.5; p=0.638); gender-ratio (2.6 vs 2.1; p=0.743); AEC (19 vs 22; p=0.002); CGS (13±2 VS 5±4; p=0.000); SBP (mmhg) (135.4±29.7 VS 111.8±33; p=0.018); DBP (mmhg) (75.4 ±13.9 VS 62.4 ±13.5; p=0.004); HR (bpm) (97.8 ±26.7 VS 123.8 ±28; p=0.004); HCO₃⁻ (IU/L) (21.1±6.6 VS 15.2 ±4.2; p=0.024); ASAT (UI/L) (52.3 VS 34.8; p=0.010); platelets (p=0.032); TP (%) (p=0.019); complications (18 VS 21; p=0.008); acute circulatory failure (2 VS 20; p=0.000); neurological distress (5 VS 19; p=0.000); multiorgan failure (2 VS 15; p=0.000). In our multivariate study; acute circulatory failure (p=0.003; adjusted OR=58.3).

Conclusion: During pathologies linked to extreme heat, acute circulatory failure is the main risk factor for mortality.

OC297. EPIDEMIOLOGICAL ANALYSIS OF FEMALE SUICIDE IN NORTHERN TUNISIA: A FIVE- YEAR RETROSPECTIVE STUDY

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Introduction: Suicide among women is a significant public health concern. In our society, it remains a subject shrouded in stigma and subject to social, cultural, and religious taboos. Aim To analyze the epidemiological and thanatological data related to female suicide in northern Tunisia.

Methods: We conducted a descriptive retrospective study including all cases of female suicide recorded in the forensic medicine department at Charles Nicolle University Hospital in Tunis, from January 2019 to December 2023.

Results: During the study period, we recorded 164 cases of female suicide. The mean age of victims was 40.8 years, with a range from 13 to 83 years. More than half of the victims had a history of psychiatric disorders, with depressive syndrome present in 16.5% of the cases. Previous suicide attempts were recorded in 23.8% of the cases, and marital conflicts were identified in 9.1% of the cases. Seasonal distribution showed that suicides were equally prevalent across summer, spring, and winter, each accounting for 27.4% of the cases. The most common method of suicide was hanging, used in 39% of cases, followed by poisoning (22.6%) and self-immolation (21.3%).

Conclusion: Suicide among women is relatively infrequent in our forensic practice. However, it is an alarming behavior that requires a multifactorial interaction to ensure better prevention of this risk due to its vulnerability.

OC298. EPIDEMIOLOGICAL AND MEDICO-LEGAL ASPECTS OF ELECTROCUTIONS IN THE NORTH OF TUNISIA: A FOUR 4-YEAR STUDY (2019-2022)

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Introduction: Electrocutation has been widely discussed as a cause of death in the international literature. However, studies on this subject in Tunisia are rare. The objectives of our study were to describe the epidemiological profile and injury characteristics of the victims in order to suggest ways of improving prevention

Methods: This is a retrospective descriptive study carried out over a 4-year period in the forensic medicine department of Charles Nicolle Hospital in Tunis in all cases of death by electrocution whose body was the subject of a forensic autopsy.

Results: We recorded 126 cases of electrocution. A predominance of males was noted with a sex ratio equal to 9.5. The average age was 39.68 years. 61.1% of those electrocuted were manual workers. Electrocutations occurred more frequently during the summer season (44%) and in grand Tunis (80.1%). Accidental electrocution was the most frequent form (97.6%). High voltage current was responsible for 52.5% of electrocutions. The majority of victims died within the first 24 hours (79.4%). No victim was transported medically. In terms of lesions, an electrical mark was observed in 71.4% of cases, with 29.4% of victims presenting both an entry and exit. Serious electrical burns were present in 34.1% of cases. Associated trauma was found in more than a third of cases (34.9%). In most cases, toxicological and anatomopathological analyses were not forwarded

Conclusion: Diagnosing electrocution with certainty is often difficult. It depends on the combination of anamnesis with autopsy findings and additional examinations. Prevention requires an accurate diagnosis.

OC299. SUICIDE AMONG THE ELDERLY IN THE KAIROUAN REGION: A NECROPSY STUDY OF 40 CASES

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Introduction: Suicide among the elderly is a major public health problem in the world and in Tunisia due to the aging of the population. This age group includes vulnerable persons in whom it is often difficult to detect suicide risk factors. Unfortunately, the majority of Tunisian studies have focused on suicide among young adults. We aim to draw up the epidemiological and thanatological profile of suicides aged over 65.

Methods: We carried out a retrospective study in department of forensic medicine of Ibn El Jazzar University Hospital, Kairouan focusing on cases of suicide of the elderly aged over 65 years whose their bodies have undergone a forensic autopsy during the period from January 1, 2009 to December 31, 2017.

Results: In our study, suicide among the elderly represented 11% of the overall rate of suicide cases collected during the study period. The average age of

the victims was 74 years, with margin ranging from 65 to 97 years. The most affected age group was between 65 and 70 years (37.5%). Concerning gender distribution, a female predominance was observed (sex ratio M/F = 0.6). Nearly a third of the victims had a psychiatric history dominated by nervous depression. Hanging was the most used way of suicide (57.5%) followed by defenestration (27.5%), self-immolation (7.5%), drowning (5%) and pesticide poisoning (2.5%).

Conclusion: This work highlights the importance of suicide prevention in the elderly. Preventive measures require systematic screening for suicidal thoughts in all aged persons and better management of psychiatric pathologies in this already compromised population.

OC300. ELECTROCUTION RELATED MORTALITY IN SFAX: A 10-YEAR AUTOPSY STUDY (2013-2023)

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Introduction: Electricity is a pervasive source of energy that many workers across various occupations and industries encounter as part of their daily activities. Both low-voltage and high-voltage can lead to death. Electrical injuries are linked to considerable rates of morbidity and mortality. The aim of this study is to provide an epidemiological feature of electrocution in Sfax, in order to identify preventive measures and mitigate their outcomes.

Methods: This is a retrospective study, covering a decade (January 1st, 2013, to December 31, 2023) and including cases of death related to electrocution, collected at the Forensic Medicine Department of Habib Bourguiba University Hospital in Sfax, Tunisia.

Results: During the study period, we collected 66 cases of death due to electrocution. Most of the victims were male, with a rate of 90.4%. The average age was 35 years, ranging from 7 to 64 years. Electrocution deaths increased during the summer, with a prevalence of 63.2%. In 10.4% of cases, no electrical burn marks were present. The upper extremity was the most common contact site, involved in 59.3%. A contact with an electrical wire was the mainly cause of electrocution with an average of 41.1%. Work-related accidents accounted for 63.9% of deaths, while home accidents were responsible for 29.8%.

Conclusion: These findings highlight the importance of implementing safety measures, particularly in work environments, to prevent electrocution-related fatalities. The study also suggests the need for further research to understand the factors contributing to the high rate of work-related accidents due to electrocution.

OC301. CHILD SEXUAL ABUSE IN KAIROUAN GOVERNORATE: EPIDEMIOLOGICAL FEATURES OF THE VICTIMS AND THE OFFENDERS

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Introduction: Child sexual abuse is a major world health problem. Despite being understated, these offenses and crimes are known to have serious implications for both the victim and the perpetrator. In this paper, we aim to study the epidemiological and clinical features of victims as well as the characteristics of the perpetrator.

Methods: We conducted a retrospective study conducted over ten years (2009-2018), at the Forensic Department of Ibn Jazzar University Hospital Kairouan, including all medico-legal reports of victims of sexual assaults who were minors.

Results: During the study period, 406 children were examined for alleged sexual assault, of which 220 were included. A feminine predominance was noted with a sex ratio of 0.2. The mean age of the victims was 13.9 years old \pm 3.5 years (extremes from 1 to 17 years old). The perpetrator was male in 99.1% of cases and known by the victim in 67.7%. More than half of the assaults (55.4%) took place at the residence of the victim or the perpetrator. The physical examination took place in the first 72 hours following the assault in 59.9% of cases. Vaginal penetration was the most common form of sexual assault (43.9% of cases) followed by sexual fondling (29.1% of cases) then anal penetration (21.4% of cases). Hymeneal injuries were observed in 24.4% of victims.

Conclusion: Child sexual abuse predominantly affects victims aged under 15 years old with a slight female predominance and often involves known male perpetrators. Immediate examinations and focused prevention efforts are crucial in addressing this serious issue.

OC302. HOMICIDE AMONG THE ELDERLY IN THE NORTH OF TUNISIA: A FIVE-YEAR RETROSPECTIVE STUDY

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Introduction: Homicide among the elderly is a tragic way to end their lives. The prevalence of homicides among the elderly is concerning, and it is important to recognize its extent. Our aim was to identify the epidemiological and forensic characteristics of homicide among the elderly in the north of Tunisia.

Methods: Cases were collected from the registry of the Department of Forensic Medicine of Charles Nicolle Hospital of Tunis, Tunisia, from January 2019 to December 2023, counting all the autopsy cases of homicide among the elderly.

Results: Twenty six cases of homicide among the elderly were collected. Among the victims, 73.1% were men (n=19), with a sex ratio of 1.88. The mean age of the victims was 73.65 years old (with extremes ranging between 66

and 87 years old). Most of homicide happened in 2021 and 2022 (respectively, n = 9; 34.6%; and n = 7; 26.9%). Five murders occurred in December (19.2%). Winter accounted ten cases winter (38.5%). In ten cases, the aggressor was unrecognized (38.5%) and in only two cases, he was a family member (7.7%). Sharp and blunt objects were the most used tools to kill (n=7; 26.9%) and cranial trauma was the main cause of death (n=9; 34.6%). Only one case of chronic abuse was identified.

Conclusion: As the global elderly population is increasing, understanding the dynamics of related homicides is essential for developing effective prevention strategies and addressing the vulnerabilities faced by older people.

OC303. SUDDEN DEATH DUE TO BRONCHOPULMONARY INFECTION IN THE SFAX REGION: A STUDY OF AN AUTOPSY SERIES

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Introduction: Bronchopulmonary infection remains one of the leading causes of mortality in the general population. These infections are responsible for approximately 3.5 million deaths each year, accounting for about 6% of all deaths. Objective: To study the anthropological profile and thanatological characteristics of deaths due to bronchopulmonary infections in the Sfax region.

Methods: We conducted a retrospective study at the Sfax Forensic Medicine Department over a 3-year period (2021-2023), including all deaths related to bronchopulmonary infection that underwent forensic investigation.

Results: During the study period, we collected 61 cases of bronchopulmonary infection with a male predominance (61%). The study found that the number of deaths from bronchopulmonary infection varied from year to year, with an average of 2.98% per year. The average age of cases was 54 years, with extremes ranging from 3 days to 91 years. More than half were married (73%), of rural origin (68%), and without pathological history (88%). The majority of victims were laborers (52%). Regarding the causes of death, viral infections by COVID-19 were the main cause in 62% of cases, confirmed by PCR. In 34% of cases, autopsies revealed the presence of purulent secretions in the lungs with a negative PCR test for COVID-19. In 2% of cases, it was a tuberculous infection with the presence of miliary and/or tuberculous cavities. In the remaining cases, there was documented nosocomial pulmonary infection following hospitalization.

Conclusion: Bronchopulmonary infections remain a significant public health issue, contributing greatly to global mortality despite medical advances. Proper management is essential.

OC304. VIOLENCE AGAINST WOMEN IN THE REGION OF SFAX-TUNISIA

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Introduction: We aim to dress the features of female victims of physical violence and to study medical and medico-legal implications of this act.

Methods: A descriptive and analytical cross-sectional study, over two months (August-September 2023), including all female victims of violence who were examined at the Forensic Department of Habib Bourguiba Hospital, Sfax.

Results: We collected 268 cases (40.7% out of total violence victims). Median age was 37 years-old (extremes: 09-79 years-old). Victims were married in 73.5% of cases, didn't pass high school in 78.9% of cases and unemployed in 49.6% of cases. The aggressor was a male in 71.6% of cases, with a mean age of 39 years old. It was mainly the spouse (40.3%). The assault took place mostly during weekends (67.2%). Blunt objects were the most used weapon (82.77%). Bruises and abrasions were the most frequent elementary lesions (respectively in 69% and 51.1% of cases), and injuries were mainly located at the upper limb. Bone fractures were found in 3.4% of victims. A median of five days as Total Temporary Disability (TTD) was found (extremes: 0-90 days). A Permanent Partial Disability (PPD) was expected in 11.6% of victims. Predictive factors of severe injuries were sharp weapons (p<0.001), wounds (p<0.001), bone fractures (p<0.001), head injuries (p<0.001) and TTD around 9 days (p<0.001).

Conclusion: The initial certificate delivered to female victims of violence holds a serious impact on the ulterior medical care and the medico-legal implications for both the victim and the aggressor.

OC305. SCALP WOUNDS FOLLOWING AN ASSAULT: DETERMINING FACTORS FOR PREDICTING PERMANENT PARTIAL INCAPACITY

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Introduction: In Tunisia, the legal classification of intentional violence is based on the existence of a partial permanent disability (PPD) that is expected after consolidation. However, this prediction is not easy, particularly in the case of scalp wounds. Aim: Our aim is to examine the characteristics of this type of lesion and to determine factors for PPD in victims with scalp wounds following an assault.

Methods: We conducted a retrospective descriptive and analytical study including all assault victims with scalp wounds examined at the forensic medicine department of Sfax-Tunisia from January 1, 2022 to December 31, 2022.

Results: We studied 207 victims with scalp wounds after an assault. The wound had a median length of 3 cm, was

deep in 87.9% of cases, parietal in 61.4%, and sutured in 87.4%. The median duration of total temporary disability (TTD) was 15 days. PPD was expected with a low probability in 12.6% of cases. In 16.9% of cases, PPD was predicted with medium probability. 46.4% of victims were expected to have minimal PPD and 12.6% were expected to have fairly significant PPD. The main factors in predicting PPD were the length of the wounds, their depth, and the duration of TTD (p -value <0.05).

Conclusion: The prediction of PPD is not always obvious in relation to scalp wounds; therefore, our study allowed us to propose the determinants of PPD prediction to solve this type of problem.

OC306. ROAD TRAFFIC ACCIDENTS IN THE REGION OF CAP BON

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Introduction: Road traffic accidents have emerged as an important public health issue in Tunisia, and are associated with significant morbidity and mortality. We aim to study the epidemiological characteristics of deaths by road traffic accident in the region of Cap Bon, and propose preventive measures.

Methods: This is a retrospective descriptive study, carried out in the Department of legal medicine of the Mohamed Taher Maamouri hospital of Nabeul, from January 2022 to December 2023.

Results: A total of 987 autopsies were performed in the period of the study, of which 46 (4.7%) were caused by road traffic accidents. The mean age of the victims was 43.7 years old, and the sex ratio men to women was 2.5:1. Of the victims, 56.5% were pedestrians struck by a vehicle or motorcycle. Victims of collision of two vehicles accounted for 23.9% of the cases. 36.9% of the victims died on the scene, while 45.7% died in the hospital. For those who survived initially, the mean hospital stay was 5.2 ± 0.8 days. The victims were transferred by ambulance in the majority of cases (75%). Most of the victims died due to a polytrauma: head injuries were the most reported (60.9%), followed by thoracic injuries (54.4%) and extremities (47.8%).

Conclusion: The victims of fatal traffic accidents were married men, from urban areas, pedestrian struck by a vehicle or a motorcycle. Combined efforts from the community, governmental and non-governmental organizations should be urgently directed towards the prevention of these accidents.

OC307. EPIDEMIOLOGICAL ANALYSIS OF SUICIDE BY SELF-IMMOLATION IN NORTHERN TUNISIA: A FIVE-YEAR RETROSPECTIVE STUDY

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Introduction: Self-immolation is one of the most violent Methods of suicide. This mode of suicide has been notably prevalent in MENA region countries, including Tunisia, particularly since the revolutionary movements. This study aims to analyze the epidemiological data related to self-immolation suicide in northern Tunisia.

Methods: We conducted a descriptive retrospective study covering all cases of self-immolation recorded by the Department of Forensic Medicine at Charles Nicolle University Hospi-tal in Tunis from January 2019 to December 2023.

Results: During the study period, a total of 173 cases of self-immolation were documented, representing 22.3% of all suicide cases, thus making self-immolation the second most commonly chosen method. The typical profile was that of a single individual with a mean age of 35.47 years \pm 13.36. More than half of the cases (55%) involved individuals with psychiatric disorders. Previous suicide attempts were recorded in 14.5% of the cases, and family conflicts were identified in 12.7% of the cases. Self-immolation occurred primarily during the summer, accounting for 27.2% of cases, with no significant daily variation observed.

Conclusion: Although more than a decade has passed since the Tunisian revolution, self-immolation remains a prevalent method of suicide. Targeted preventive measures for vulnerable populations are essential to address and mitigate this persistent trend.

OC308. VIOLENT DEATH OF WOMEN IN THE KAIROUAN REGION: A NECROPSY STUDY OF 82 CASES

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Introduction: The violent death of women remains a major public health problem on a national and an international scale. This issue has particularities related to the gender and the social status of the victim. The medico-legal diagnosis of violent death is not always easy. Studies on this subject are rare despite its increasing frequency. We aim to draw up the epidemiological and thanatological aspects of violent death of women in the Kairouan region and to discuss the preventive measures.

Methods: We carried out a retrospective study in departments of emergency and forensic medicine in Ibn El Jazzar University Hospital, Kairouan concerning the violent death of women aged over 18 years during a period of 4 years from January 1, 2019 to December 31, 2022.

Results: In our study, violent death of women represented 5.4% of the overall rate of deaths during the study period. The average age of the victims was 44.49 years. The most affected age group was under 36 years (39%). Accidents represented the most frequent medico-legal form (54.9%) dominated by road accidents (55.5%) followed by domestic accidents (37.8%). Burns were the most

frequent etiology of domestic accidents (35%). Hanging was the dominant suicidal way (64.3%). Homicide by sharp weapon was the most frequent criminal form (55.6%) and the aggressor was known to the victim in 88.9% of cases.

Conclusion: This work highlights the importance of preventing violent death in women. Preventive measures include adequate protection of their environment, systematic screening for suicidal thoughts and the detection of psychiatric pathologies.

OC309. FATAL TRAFFIC ACCIDENTS AMONG THE ELDERLY IN NORTHERN TUNISIA: EPIDEMIOLOGICAL ASPECTS AND INJURY PROFIL

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Introduction: In Tunisia, the increased use of land transport has been accompanied by a rise in the number of fatal traffic accidents (FTAs). This downfall affects all demographics, including the elderly. Our aim was to analyze the epidemiological characteristics of elderly individuals who were victims of FTAs in northern Tunisia and to describe the observed injury outcomes.

Methods: A descriptive, cross-sectional study was conducted with a retrospective collection of data concerning elderly victims (aged 65 years or older) who died as a result of FTAs occurring between January 2014 and December 2020. The study was based on cases that underwent forensic examination at the Forensic Medicine Department of Charles Nicolle Hospital in Tunis.

Results: During the study period, 531 elderly victims of FTAs were collected. The majority of victims were male pedestrians (76.6%), with a mean age of 75.11 years (\pm 7.13). The FTAs predominantly occurred in urban areas (92.5%), on city roads (84.9%), in the Greater Tunis area (85.9%), and involved being struck by a light four-wheeled vehicle (51%). The accidents primarily occurred on weekends (26.5%), between 08:00 AM and 12:00 PM (22.8%), with death occurring within the first 24 hours (59.9%) due to multiple trauma (77%) with at least three components.

Conclusion: This study provided a detailed profile and injury mapping of elderly victims of FTAs. Urgent preventive measures are required to outcome this problem effectively.

OC310. SUDDEN CARDIAC DEATH IN YOUNG INDIVIDUALS: A 16-YEAR STUDY

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Introduction: The study of sudden cardiac death in young individuals is crucial for understanding and preventing this tragedy. This condition, which affects seemingly healthy young people, can have a devastating impact on families, communities, and healthcare professionals. This study aims to examine the extent of sudden cardiac death in young individuals and identify preventive measures.

Methods: This retrospective descriptive study focused on all cases of sudden cardiac death in young individuals that underwent medicolegal autopsy at the Department of Forensic Medicine, Habib Bourguiba Hospital, Sfax, over a 16-year period (2008-2023).

Results: We recorded 96 cases, with a clear male predominance (65.6%). The median age was 25 years, with percentiles of 17.25 and 31.75 years. A history of cardiovascular disease was noted in 17 cases (17.7%). Smoking was observed in 24% of cases, while alcohol consumption was reported in only 7 cases. Hypertrophic cardiomyopathy was the leading cause of death ($n=34$, 35.1%), followed by ischemic heart disease (25%).

Conclusion: Medico-legal autopsy plays a crucial role in determining the cause of death and has a preventive role considering the genetic origin of many cardiac pathologies that can lead to sudden death. Screening among relatives is essential for prevention.

OC311. ANALYSIS OF EPIDEMIOLOGICAL CHARACTERISTICS OF ACCIDENTAL WORK ACCIDENTS IN THE REGION OF SFAX

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Introduction: The incidence of work-related accidents (WRA) has decreased in industrialized nations because of better working conditions. However, the high death rate from WRAs persists in developing nations like Tunisia. Our aim was to identify the epidemiological and thanatological particularities of accidental death in the workplace in Sfax, Tunisia.

Methods: Cases were collected from the registry of the Department of Forensic Medicine of Habib Bourguiba Hospital in Sfax, Tunisia, from 2016 to 2022, counting all the cases of accidental death in workplace.

Results: Seventy cases of accidental death in the workplace were collected. Among the victims, 98.57% were men ($n=69$), and 53.6% were living in urban areas ($n=37$). The most pronounced age bracket was between 46 and 50 years old. Nearly 35% of the fatalities were employed in the agriculture and fishing sector. Industrial and construction sectors occupied the second and the third place (respectively 27.14% and 22.85%). The three most represented forms of death were due to drowning (34.3%), falls from heights (21.4%) and blunt items hitting the body (15.7%). With 84.3% of casualties, the blue-collar class was the most represented; just 2.85% of victims belonged to the management group. Of the total number of deaths, 62.9% happened at the scene

of the accident, and only 22.9% were hospitalized in an intensive care unit.

Conclusion: One of the biggest issues with public health is work-related accidents. Workplace safety prevents accidental deaths, protects employees, and enhances productivity, requiring continuous training, risk assessment, and safety culture.

OC312. STUDY OF DROWNING CASES IN IMMIGRATION SHIPWRECKS: ABOUT AN AUTOPSY SERIES

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Introduction: The sinking of migrant boats in Tunisia is a tragic and recurring problem. Tunisia has become a significant departure point for many migrants seeking to cross the Mediterranean to Europe, leading to numerous fatalities and mass disasters. Aim: To describe the epidemiological and thanatological profile of subjects who are victims of deaths by submersion following the sinking of immigration boats, in order to draw appropriate preventive measures.

Methods: This is a retrospective and descriptive study of all cases of death by submersion following the sinking of illegal immigration boats, subjected to forensic autopsy within the Sfax forensic medicine service during 2023

Results: In 2023, 1593 autopsies were performed in the forensic medicine department of Sfax. We have collected 889 cases of deaths by submersion following the sinking of immigration boats, representing 55.8% of our activity. The summer and spring periods were the most affected (85.2%) with two peaks in frequency during the months of April and August (31.6% and 25.3% respectively). The victims were mainly male (61.4%) with a sex ratio of 2.17. We noted the presence of children in 5.1% of cases, infants in 2% of cases, and pregnant women in 0.5% of cases. 85.8% of cases are discovered in a state of putrefaction. Samples were systematically taken for a genetic study

Conclusion: The sinking of migrant boats in Tunisia poses a major challenge for the identification and burial of victims. The increasing number of deaths complicates body management, highlighting the urgent need for effective preventive measures.

OC313. MEDICO-LEGAL STUDY ON THE FOREIGNER'S DEATH IN THE REGION OF SFAX

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Introduction: The flow of foreigners to our country is increasing day by day especially in view of the increase in the number of immigrants in our country. The aim of our work is to study the epidemiologic characteristics of the

death of foreigners in our country.

Methods: We conducted a descriptive retrospective study including all cases of foreigners dying in our country whose bodies were subject to a medico-legal autopsy at the Sfax Forensic Medicine Department over a period of 90 months..

Results: We collected 121 cases of death among foreigners .Victims were mostly males(79.3%) . We noted an increase in the number of deaths peaking in 2023 (33 cases). The victims were of African origin in 87.6% of cases and of European origin in 11.6% of cases. Sub-Saharan African origin accounted for 52.9% of all victims. Death occurred at home in 31.7% of cases, in a healthcare facility in 26.7% of cases, and on the street in 25% of cases. The most common reasons for visiting our country were refuge (55%) and health/medical reasons (17%). Natural causes accounted for 53.9% of deaths and violent causes for 47.1%. Among the violent deaths, 30.6% were accidental, 13.2% were criminal, and 3.3% were suicidal.

Conclusion: In recent years, the number of deaths of foreigners has risen sharply. this phenomenon deserves our attention and preventive measures must be taken.

OC314. PATTERN OF VOLUNTARY FACIAL VIOLENCE AGAINST WOMEN

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Introduction: Voluntary facial violence against women is recognized as a major public health problem, with potentially devastating effects on women, especially due to the importance of the face in the human body. We aim to specify the socio-demographic characteristics of female victims of voluntary facial violence as well as risk factors related to serious violence against women.

Methods: This is a retrospective, descriptive and analytical study including all women victims of voluntary facial violence, examined on judicial requisition at the Forensic Department of Habib Bourguiba Hospital in Sfax, over two years (March 1st, 2018 to February 29th, 2020). Physical violence is considered serious when a forensic specialist predicts long term effects at the lesional stage.

Results: During the study period, among 2,909 women victims of voluntary physical violence, 1,228 cases of women victims of facial trauma were collected (42.2%). The age median of victims was 33 years, with a percentile [25;75] of [25;41]. The majority of victims were married (84.4%), jobless (53.3%) and of an urban origin (74%). The average duration of Total Temporary Disability was 7.82 days +/-5.3 days. A total of 130 cases (10.6%) were considered serious. Serious physical violence was statistically correlated to the relationship with the aggressor(intimate partner), the type of weapon(sharp or blunt object) and the type of injury.

Conclusion: Face injuries have a symbolic value that is not specific to violence against women but is similar to all intentional damage. Besides, according to Tunisian law,

the culprit may face higher penalties in cases of deformity brought on by facial harm.

OC315. PATTERNS OF INJURIES IN NON-FATAL ROAD TRAFFIC ACCIDENTS IN THE REGION OF SFAX, TUNISIA

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Introduction: Road traffic accidents are among the world's leading causes of injuries and fatalities, resulting in various injuries and imposing high economic costs at both individual and societal levels. This study aims to identify the epidemiological characteristics of victims of road traffic accidents (RTAs) and describe patterns of road traffic injuries.

Methods: We conducted a cross-sectional study from October 1st, 2022, to December 31st, 2022, involving all victims of RTAs who consulted the Forensic Medicine Department of Habib Bourguiba University Hospital in Sfax.

Results: We collected data on 454 RTA victims out of 1,653 individuals examined in our unit. There was a predominance of male victims (sex ratio: 3). The median age of the patients was 37 years. The victims were daily workers in 52.4% of cases. The injury mechanism involved a motorcycle and a car in 52% of cases and pedestrians struck by a car in 32.6% of cases. Peripheral injuries occurred in 52.3% of cases, and severe head trauma was observed in 11.8% of cases. Following these injuries, 22.7% of victims required immobilization, 18.3% received local care, and 13.4% underwent surgical intervention. The median duration of incapacitation was 21 days. Permanent disability was expected in 94.3% of victims.

Conclusion: Road traffic accidents constitute a significant portion of our clinical activity at the Forensic Medicine Department. The consequences of these accidents can lead to major disabilities. This work highlights the urgent need for implementing national preventive strategies to reduce the incidence and severity of RTAs.

OC316. ATTITUDES AND PERCEPTIONS OF THE USE OF ARTIFICIAL INTELLIGENCE AMONG MEDICAL STUDENTS

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Introduction: Despite the growing integration of Artificial Intelligence (AI) in healthcare, few studies have explored this field among healthcare professionals in Tunisia. This study explores these attitudes and perceptions among medical students in Tunisia.

Methods: A descriptive cross-sectional study was conducted at the Salah Azaiez Institute involving 96 medical students. A face-to-face questionnaire assessed their attitudes and perceptions regarding AI using a Likert scale (5 = strongly agreed, 1 = strongly disagreed).

Results: Participants had a mean age of 29.3 ± 3.6 years, with ages ranging from 23 to 44. The gender ratio was 0.31. Most respondents were medical residents (76%), with 66.7% in medical specialties, 10.4% in surgical specialties, and 11.5% in radiology. Three-quarters (75.8%) strongly agreed to agreed that healthcare students should learn the basics of AI. Additionally, 24.2% strongly agreed and 44.2% agreed that AI should be part of medical education. Regarding AI's role in specialties, 38.9% agreed that some specialties might be replaced by AI, and 17.9% strongly agreed. Conversely, 26.3% strongly disagreed and 32.6% somewhat disagreed that AI could work independently in the future. Furthermore, 41% completely disagreed and 29.5% disagreed that AI would replace teachers. Additionally, 54.7% disagreed or strongly disagreed that clinical AI technology would surpass healthcare staff in accuracy.

Conclusion: Tunisian medical students support incorporating AI basics into their education but are skeptical about AI's potential to replace healthcare professionals and its future accuracy. These findings highlight the need for balanced AI training that acknowledges both its potential and limitations.

OC317. ETHICAL ISSUES OF ARTIFICIAL INTELLIGENCE AMONG HEALTHCARE PROFESSIONALS

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Introduction: Artificial intelligence (AI) presents ethical challenges in healthcare. This study investigates the ethical concerns of AI in healthcare from the perspective of professionals, aiming to guide ethical AI integration in clinical practice.

Methods: A descriptive cross-sectional study was conducted in the Salah Azaiez Institute, among healthcare professionals. An anonymous questionnaire was administered, including questions about ethical issues of the use of AI in healthcare.

Results: A total of 101 healthcare professionals responded to the questionnaire. The mean age was 29.3

± 3.6 years, and the gender ratio was 0.31. Thirty percent of participants were from surgical specialties and 70% from medical specialties. The majority of participants (86.3%) reported that AI should always be supervised by physicians to ensure ethical use and high-quality care. A significantly higher percentage was observed among medical specialties compared to surgical specialties for this question ($p = 0.01$). Most respondents (78.0%) stated that AI should be used as a decision support tool for doctors rather than as a substitute. More than half of the participants (56.8%) perceived that AI use could compromise the doctor-patient relationship, and 41.1% believed that AI might violate medical confidentiality. There was no significant difference in the perception of ethical considerations of AI use between the specialties for the above questions.

Conclusion: Despite the great progress made by artificial intelligence in the field of medicine and health, this achievement has imposed new demands in the field of medical ethics.

OC318. ARTIFICIAL INTELLIGENCE (AI)-BASED MODELS FOR PREDICTING HEALTHCARE-ASSOCIATED INFECTIONS IN SURGICAL SETTINGS: FINDINGS FROM A TUNISIAN UNIVERSITY HOSPITAL

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Introduction: Artificial Intelligence (AI) and machine learning (ML) might support the development of Hospital-acquired infections (HAIs) surveillance algorithms aimed at understanding HAIs risk factors, improve patient risk stratification and prediction. The purpose of this study was to build a model for predicting HAIs among patients admitted in surgical area by adopting machine learning techniques.

Methods: It's a retrospective study on patients admitted in the surgical departments of Ibn Al Jazzar university hospital from 2010 to 2021. Data were retrieved from The NOSOKAIR Surveillance database. Five machine learning algorithms, including XGBoost, KNN, SVM, SGD, and MLP, were utilized to build predictive models.

Results: Of the 704 inpatients included, 35 were developed HAI, with an overall prevalence of 5.4%. Among the five adopted machine learning algorithms, XGBoost exhibited the optimal predictive accuracy versus the remaining algorithms. The features with the greatest predictive value were age, sex, and length of surgery.

Conclusion: These Results are encouraging, as they suggest good HAIs prediction performance using modern ML approaches. Our predictive model could be a useful tool for physicians treating patients in surgical settings.

OC319. PERFORMANCE OF DEEP LEARNING

ALGORITHMS IN BREAST CANCER SCREENING: A REVIEW OF LITERATURE 2022-2024

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Introduction: Breast cancer (BC) is the second leading cause of death among women globally. Conventional interpretation of mammography faces challenges such as false positives and negatives leading to missed diagnosis or excessive biopsies. Leveraging the advances in Artificial Intelligence (AI) may assist and improve BC screening. Aim: To review available literature and describe performance metrics of state-of-the-art algorithms.

Methods: We conducted a comprehensive literature search using PubMed with the Mesh terms: ("Artificial Intelligence"[Mesh]) AND "Early Detection of Cancer"[Mesh] AND "Breast Neoplasms"[Mesh]. We included articles published in English between July 2022 and July 2024, while excluding review articles and studies lacking performance metrics. We used Excel for data entry and Stata-SE-17 software for data analysis.

Results: The search identified 130 articles, with 53 meeting the inclusion criteria. AI algorithms were specified in 81% of the included studies, with Lunit's-INSIGHT-MMG, a commercially available deep learning-based AI-Computer Assisted Detection program, being the most frequent (23%). Performance metrics varied widely, with sensitivity ranging from 35.5% to 98.7% (mean=79.5%±14.5%), specificity from 53.9% to 97.7% (mean=87.1%±11.8%), and Area Under the Curve (AUC) values from 0.59 to 0.99 (mean=0.89±0.08). The highest performance overall was achieved with a Deep Learning (DL) model particularly a Convolutional Neural Network (CNN) with 98.7% sensitivity, 97.7% specificity and 0.98 AUC.

Conclusion: Our review revealed variability in the performance of AI algorithms in BC screening, which may be attributed to the quality of data inputs, differences in architectures and in training methodologies. Despite this variability, AI, especially CNN, has shown potential for enhancing screening. Further validation studies are necessary for clinical implementation.

OC320. PREDICTION OF CARDIOVASCULAR EVENTS IN HEART FAILURE PATIENTS IN TUNISIA USING MACHINE LEARNING METHODS

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Introduction: With the rise in the prevalence of

individuals suffering from cardiovascular conditions, there is a growing demand for enhanced risk-assessment frameworks to predict cardiovascular incidents more effectively. We aimed to Predict cardiovascular events in heart failure patients by integrating advanced artificial intelligence Methods.

Methods: This study used a database of patients with heart failure with reduced ejection fraction, recruited from the cardiology department of Hédi CHAKER University Hospital of Sfax, including demographic information, medical history, lifestyle habits, and clinical and biological Results. Python was used for data cleaning and all statistical analysis, from exploration to prediction. The integrated development environment used was Spyder, as part of the individual version of Anaconda installed on a local computer.

Results: During the study period, 116 patients with reduced ejection fraction heart failure were included. Models based on supervised learning algorithms, such as SVM and logistic regression, have shown promising performance. SVM and logistic regression models achieve 100% accuracy. The random forest follows with high accuracy, while KNN and the decision tree have lower accuracies.

Conclusion: These models can assist cardiologists in making appropriate treatment decisions, thereby improving patient care. The Results provide enhanced information on cardiovascular diseases.

OC321. KNOWLEDGE, ATTITUDES AND PRACTICES OF HEALTHCARE STUDENTS TOWARDS ARTIFICIAL INTELLIGENCE IN SCIENTIFIC WRITING: A SCOPING REVIEW

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Introduction: The use of Artificial Intelligence (AI) tools in scientific writing is expanding. However, the Knowledge, Attitudes, and Practices (KAP) of healthcare students regarding this topic are underexplored. Aim: To examine current biomedical literature on healthcare students' KAP towards ChatGPT® in scientific writing.

Methods: A scoping review was conducted according to PRISMA-ScR guidelines through MEDLINE, Scopus and Web of Science databases. We searched for articles published between January-2022 and July-2024 focusing on healthcare students' KAP towards AI and ChatGPT® in scientific writing contexts. Screening and selection were independently conducted by two authors. In case of disagreement a third reviewer was sought.

Results: From 41 articles found, five were eligible for final analysis. Medicine, pharmacy and dentistry students, included in reviewed studies, showed moderate knowledge about AI. While they are "familiar" with general AI-related terms, their skills in working with AI-powered tools are limited. Generally, students had positive attitudes towards ChatGPT® considering it as

a "helpful and powerful tool" which enhance scientific writing. However, they remain aware of concerns regarding the validity, accuracy, and reliability. Students acknowledged using ChatGPT® irregularly to assist with scientific research, summarizing topics and paraphrasing. Moreover, they expressed a need for a formal teaching on using AI tools effectively.

Conclusion: This Scoping review focusing on healthcare students' KAP towards ChatGPT in scientific writing showed moderate knowledge, positive attitudes with validity and integrity concerns persisting. Practices were generally unoptimized highlighting the need for enhanced education in AI tools to maximize benefits and address shortcomings.

OC322. CRITICAL REFLECTION ON ARTIFICIAL INTELLIGENCE RECOMMENDATIONS FOR BLOOD EXPOSURE ACCIDENTS

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Introduction: "Generative AI" refers to algorithms that create new content from existing content. While not widely used in Tunisian primary care, some foreign AI algorithms face criticism for potential biases. We aimed to assess how well AI-generated recommendations for managing blood exposure accidents (BEAs) align with French scientific guidelines.

Methods: Two generative language models, ChatGPT 3.5 and Gemini, were tested. Each was given this prompt: "As a hospital occupational physician managing BEAs for healthcare staff, follow the recommendations of French scientific societies. Describe the immediate management steps for a BEA in a nurse, including the PEP decision-making process." The responses were independently interpreted and compared to French scientific guidelines for concordance.

Results: Both models identified the essential steps for the immediate management of BEAs: wound washing, risk assessment of contamination, decision-making for post-exposure prophylaxis (PEP), patient information, and follow-up. The Gemini model provided two additional pieces of information: reporting the BEA and the references used. Conversely, the ChatGPT 3.5 model included additional steps such as preventive measures but required a specific command to detail the decision regarding PEP. This command was not necessary with the Gemini model, which provided complete details on PEP without additional instructions. The recommendations from both models were consistent with the guidelines of the French scientific societies. However, the Gemini model proved to be more comprehensive and precise in its responses.

Conclusion: AI can provide BEA management recommendations comparable to those of French

scientific societies. The Gemini model showed greater completeness and precision. However, physicians must fully understand the risks and necessary actions to minimize them.

OC323. AWARENESS AND ADOPTION OF ARTIFICIAL INTELLIGENCE AMONG MEDICAL PROFESSIONALS IN TUNISIA

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Introduction: The recent revolution in Artificial Intelligence (AI) has significantly impacted various domains, including scientific research production. This study aims to assess the reach of AI in scientific paper production in Tunisia and evaluate the knowledge, awareness, usage, and perceived risks among medical professionals.

Methods: A digital survey, distributed via Google Forms, targeted doctors across various specialties and career levels, from interns to specialized practitioners.

Results: A total of 50 responses were received within one month. The respondents were predominantly specialists (50%), with most having 9 to 12 years of experience. Females constituted 68% of the sample. The study found a high adoption rate of AI tools (78%). These tools are widely used for proofreading and enhancing content readability (60% of the responder's use). However, there is a cautious approach: 84% of respondents verify AI-generated data, and over 50% do not disclose their use of AI tools. Furthermore, 56% agreed that ethical guidelines should be established for using AI in scientific paper production. On the other hand, the data also highlight a gap in formal training as 60% of the responders indicated lack of specific training.

Conclusion: The study underscores the significant potential of AI tools in transforming scientific research but highlights the need for structured training and ethical guidelines within the medical profession to maximize benefits and mitigate risks.

OC324. MISUSE OF GENERATIVE ARTIFICIAL INTELLIGENCE IN SCIENTIFIC PUBLICATIONS BY NON-NATIVE ENGLISH SPEAKERS

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Introduction: Generative Artificial Intelligence (Gen-AI) has increasingly found its way into scientific medical writing, which can be particularly inappropriate in non-native English-speaking countries. This study aimed to determine the prevalence of AI-generated texts in medical writing within publications originating from the Greater Maghreb countries.

Methods: This was a cross-sectional study that gathered all medical publications indexed on MEDLINE, published in the first week of July 2024, with first authors affiliated with Greater Maghreb countries. The rate of AI-generated texts was calculated using the AI detector tool: ZeroGPT®. Each article was analyzed in its entirety and each section separately (Abstract, Introduction, Methods, Results, Discussion, and Conclusion). Articles or sections were considered "suspect" of AI generation with a rate $\geq 25\%$. Results were presented as medians associated with their corresponding Inter Quartile Range (IQR).

Results: In all, 48 scientific medical articles were published by first authors from the Greater Maghreb countries: 24 from Tunisia, 23 from Morocco, and one from Libya. These articles were published in 12 journals, six of which are ranked in the Q1 or Q2 quartile. Publications were classified as "suspects of AI generation" (sAI-g) in 65% of cases, with a median rate of 36.2% [IQR=11.0%-49.4%]. AI-generated text was detected mainly in three sections: "Material and Methods" (sAI-g=86%, median=59.3% [IQR=28.5%-71.7%]), "Abstract" (sAI-g=69%, median=52.2% [IQR=0.0%-90.1%]) and "Introduction" (sAI-g=58%, median=43.2% [IQR=0.0%-79.4%]). Conclusion: Scientific

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Conclusion: Scientific medical articles from the Greater Maghreb countries used Gen-AI extensively. Hence the necessity of capacity building for non-native English-speaking researchers and systematic control of academic integrity.

OC325. LARGE LANGUAGE MODELS AN AI TOOL FOR PLAIN LANGUAGE SUMMARY, IN SCIENTIFIC PUBLICATION WRITING

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Introduction: Plain Language Summaries (PLS) increase accessibility and impact of scientific research on the general population and reflect researchers' social responsibility. Novel Large Language Models (e.g., ChatGPT®) could help generate PLS. Aim: Evaluate the adequacy of generated PLS for published medical articles using ChatGPT-4o.

Method: ChatGPT-4o was used to generate PLS in Arabic applied on a series of seven epidemiological studies published in 2022 in 'La Tunisie Médicale'. A checklist of adequacy composed by 10 iso-weighted (0/1) items encompassing the structure (e.g., 'Proposal for general population') and writing practices (e.g., 'Simplified language') was applied to assess the generated summaries. A median global score out of 10 points and median specific scores out of 5 points were calculated.

Results: The global median score was 7/10 (min=6, max=10) points; The median scores for the structure and writing practices were 4/5 (min=3, max=5) points and 3/5 (min=3, max=5) points, respectively. All generated PLS were 'concise' (used less than 500 words), used a 'neutral style' and had an appropriate 'Proposal for general population' section. Moreover, for six articles, the following sections were respected: 'Key messages', 'Evidence' and 'Implications'. However, only two summaries had an 'easy-to-understand title' and used a 'simple vocabulary without jargon'. Some limitations were noted such as repetition between sections, over summarisation and hallucinations.

Conclusion: ChatGPT-4o, a popular AI tool, generated satisfactory PLS especially for structure but exhibited a limited simplicity in vocabulary. Prompt optimisation and reviews by the public are necessary for the creation of population-centred summaries.

OC326. ARTIFICIAL INTELLIGENCE FOR DIABETIC RETINOPATHY SCREENING: PERFORMANCE OF AN EFFICIENTNET-B5 CONVOLUTIONAL NEURAL NETWORK

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Introduction: Diabetic Retinopathy (DR) is a significant global public health concern and a leading cause of blindness. Timely detection of DR is crucial for preventing vision loss among diabetic patients. Aim: To develop a deep learning (DL) solution for DR screening from eye

fundus photographs.

Methods: We utilized the Kaggle Diabetic Retinopathy Detection Dataset (EyePACS 2015) for training and validation, and the Asia Pacific Tele-Ophthalmology Society Blindness Detection Dataset 2019 (APTOS 2019) for testing. Preprocessing involved resizing, cropping, and contrast adjustment. We employed a transfer learning approach using an EfficientNet-B5-based binary regression model trained for 125 epochs with a learning rate (LR) of 0.0001. We computed various performance metrics, including Quadratic Weighted Kappa (QWK), specificity, sensitivity, and area under the receiver operator curve (AUC).

Results: From a total of 35,126 eye fundus photographs (EyePACS 2015), we included 28,101 images (80%) in the training dataset (20,648 no DR and 7,453 DR) and 7,025 (20%) in the validation dataset (5,162 no DR and 1,863 DR). We included a total of 3,662 fundus images from the APTOS 2019 in the testing dataset (1,805 no DR and 1,857 DR). Our final model showed a QWK of 92.0%, specificity of 93.0%, sensitivity of 98.0%, and AUC of 96.0% in DR detection on the test dataset (see Figure).

Conclusion: Our EfficientNet-B5-based model has achieved competitive performances across two large independent datasets. This work has promise in DR screening, particularly in resource-constrained settings, underscoring the potential of artificial intelligence as a tool for assisting public healthcare interventions.

OC327. SHAPING THE FUTURE OF DENTAL HEALTHCARE WITH AI-POWERED TELEDENTISTRY

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Introduction: The rapid growth of Artificial Intelligence (AI) over the past decade has opened new perspectives for its application in teledentistry. Teledentistry, which utilizes telecommunication technology to provide dental care at a distance, has been particularly receptive to AI integration. This study aims to explore the impact of AI-driven teledentistry on improving access to dental healthcare services.

Methods: We conducted a literature review about current AI applications in teledentistry, analyzing their effectiveness in diagnostic accuracy, treatment planning, real-time guidance, and operational efficiency. Data were collected from various teledentistry platforms that have successfully incorporated AI technologies.

Results: The findings indicate that AI-driven teledentistry has enhanced diagnostic precision, enabled virtual treatment planning, and provided real-time patient monitoring. AI has also improved the operational aspects of dental practices by automating administrative tasks. Notable successes include FDA-approved AI diagnostic tools and significant funding for AI-powered dental diagnostics companies. AI-driven teledentistry has the potential to bridge the gap in dental healthcare access, especially for underserved populations. However, challenges such as data privacy, cybersecurity, and the

need for regulatory frameworks are still prevalent. Addressing these challenges is crucial for the continued success and acceptance of AI in teledentistry.

Conclusion: AI-driven teledentistry represents a transformative shift in dental healthcare, offering a more accessible, efficient, and personalized approach to dental care. With ongoing technological advancements and proper regulatory measures, AI-driven teledentistry can significantly contribute to global dental healthcare equity.