BRAF V600E MUTATION DETECTION : THE EXPERIENCE OF SALAH AZAIEZ INSTITUTE

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Introduction: The BRAF protein is an intracellular kinase in the mitogen-activated protein kinases (MAPK) pathway. Functionally, BRAF regulates essential cell processes such as cell growth, division, differentiation, and apoptosis. The gene BRAF transforms normal cells into cancerous cells when mutated. The most common BRAF variant, V600E, constitutively activates the kinase and causes cell proliferation.
Objective: The aim of our study is to estimate the rate of BRAF V600E mutations in various neoplasms.
Method: BRAF V600 mutations were searched by real time PCR using Idylla technologie in paraffin
blocks from 1405 tissue patients: colo-rectal carcinoma, melanoma, gynecological
carcinoma, lung carcinoma, pilocytic astrocytoma and histiocytosis.
Results: BRAF V600E mutation was detected in 3.5% of colo-rectal carcinoma, 25 % of melanoma and a half of astrocytoma and histiocytosis tested cases. No mutation was found in primary lung carcinoma. Our results highlighted a less implication of BRAF V600E mutation in colorectal cancer and melanoma compared to bibliographical data (8 to 12% for colorectal cancer and 40 to 60% for melanoma).
Conclusion: Regarding the other pathologies studied, preliminary results were concordant with scientific literature data.

COMPARISON OF KRAS MUTATION STATUT IN PRIMARY COLORECTAL CANCER AND ITS RECURRENCE/ METASTASES

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Introduction: Colorectal carcinogenesis is a multistep event wherein mutated KRAS is an important predictive factor for EGFR therapy. Our study aimed to compare Kras mutations profiles in metastatic or recurrent tumor compared to primary tumors of the same patients and highlight cases with discordant profile.
Methodology: We included patients having both primary and metastatic/recurrent colorectal tumors 'paraffin tissue block. KRAS mutations statement was made by real time PCR using Idylla technology.
Results: Six patients were tested. Discordant mutation profile between primary and metastasis or recurrent tumor was found in three patients: the first patient presented a K117N KRAS mutation in its liver metastasis while KRAS had a wild genotype in colorectal primary tumor. A second patient carried a A146P/T/V NRAS mutation in its primary tumor but none in the anastomotic recurrence; the third case presented a wild type KRAS in primary tumor, then carried a G12D KRAS mutation in lung metastasis. The three other patients presented the same mutational profile in both metastatic and primary tumors.
Conclusion: For better assessment of Kras mutation, metastatic or recurrent tumor tissue should be used rather than primary tumor sample since discordant status could be observed.

ASSESSMENT OF POLE MUTATED STATUS IN TUNISIAN ENDOMETRIAL CANCER PATIENTS: SALAH AZAIZ INSTITUTE EXPERIENCE

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Introduction: Molecular classification of endometrial cancer is necessary for therapy patients management, this classification is based on three principal molecular targets, the DNA polymerase-ε (POLE), mismatch repair proteins and the TP53. If mismatch repair proteins and TP53 expressions are commonly evaluated using immunohistochemistry method, POLE function has to be assessed by gene testing. In this study, we searched for functional POLE mutations, screening the exonucleasic region of the DNA polymerase Epsilon.
Method: We screened the exons 9 to 14 of POLE gene in fifty patients with endometrial cancer; briefly after DNA extraction from fresh or embedded tumor tissues, exons 9 to 14 were amplified then sequenced by Sanger method; Sequences were analyzed by Chromas software.
Results: Screening of exonucleasic region in our patients revealed new and known pathogenic mutations in exons 11 (G364R, W369X) and 13 (W410X, W410G and M444R), none of the 5 hot spots mutations was found in our series. All mutated patients presented normal P53 expression and two patients were deficient for mismatch

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repair proteins (G364R and W369X mutated patients), the three others mutated patients were young women (27; 31 and 39 years old) with proficient mismatch repair proteins.

Discussion and Conclusion: Human DNA polymerase plays crucial functions in exactly DNA replication and proof reading, avoiding bases replications errors. Nucleic changes in POLE gene, notably in exonucleasic region, could affect the fidelity of replication promoting a mutator phenotype. Genetic data bases highlighted 5 pathogenic hotspot mutations and several other "likely pathogenic" mutations affecting POLE function in endometrial cancer tissues; our screening points up new "likely pathogenic" mutations in highly conserved POLE regions that could be genetics'characteristic or our Tunisian population.

MOLECULAR PROFILE OF BREAST CANCER LIVER METASTASES: SALAH AZAIEZ INSTITUTE EXPERIENCE

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Introduction and objective: The liver is the third most frequent metastatic site for breast cancer (BC). Molecular profile of the metastatic tumor is crucial in choosing the appropriate treatment. Therefore, we aimed to analyze the expression levels of estrogen receptor (ER), progesterone receptor (PR), human epidermal growth factor receptor 2 (HER-2) in the liver metastatic lesions.

Methods: A retrospective analysis including 45 ultrasound-guided liver biopsies gathered in pathology department of salah azaiez institute over three years. ER, PgR, and HER2 status were determined by immunohistochemistry.

Results: The study comprised 45 female with mean age of 56 years. The most frequent histological type was invasive ductal carcinoma (85%). Papillary subtype was found in only one case. The majority of BC cases had Luminal profile: Estrogen receptors were positive in 82% cases and Progesterone receptors in 57%. HER-2 score3 was found in 11% of cases. Triple negative tumors were not found.

Discussion and conclusions: Although there are some discrepancies in reports about preferential organ sites of breast cancer metastasis, it is now accepted that particular metastatic sites are associated with different breast cancer subtypes : Luminal BC preferentially metastasizes to the bones, while HER-2 and basal-like BC often develop visceral metastases including liver. Surprisingly, our results are discordant with the data in the literature. This could be biais of selection of patients and should be more studied according to clinical data.

BONE METASTASES OF MAMMARY ORIGIN: DIAGNOSTIC CHALLENGES

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Introduction: Breast cancer (BC) is one of the leading malignancies among women, frequently metastasizing to bones. Determining with precision the molecular phenotype may be challenging, due to the various technical processes the specimen undergoes, particularly the decalcification procedure.

Objective: We aimed to assess the contribution of immunohistochemistry in determining mammary origin of bone metastasis and to determine its molecular phenotype.

Methods: We gathered all cases of bone metastasis of mammary origin diagnosed in our department over a 4-year period.

Results: There were 23 cases of bone metastasis, all belonging to female patients. The mean age was 58 years. Immunohistochemical study was carried out in 22 cases. It was non contributive in 2 cases, and it was performed on specimens from the original tumor in 2 other cases. Hormone receptors (HR) were positive in 16 cases. Overexpression of HER2 was noted in 2 cases. Ki67 proliferation index was analyzed in 8 cases, and it was high in 5 cases.

Discussion: Metastases are one of the main reasons for the high mortality rate of BC, with studies identifying the bone as the most frequent site of metastatic spread. Although triple-negative (TNBC) and HER2+ BC are more aggressive and have higher propensity for metastasis, research has shown that HR+ subtypes are more commonly associated with bone metastases.

Conclusions: Molecular subtypes of BC tend to give rise to distant metastases at specific sites. Luminal A cancers are particularly prone to developing bone metastases as the initial site of spread.

IMMUNOHISTOCHEMICAL CHARACTERISTICS OF BRONCHO-PULMONARY METASTASIS

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Introduction: secondary broncho-pulmonary tumors are a common diagnostic problem in anatomopathology due to high tumor heterogeneity and sometimes clinical-morphological discordance. A wide range of immunohistochemical markers has recently become available to determine the primitive of lung metastases.

Methods: Retrospective study of lung metastases diagnosed on bronchopulmonary biopsies collected at the Pathological Anatomy and Cytology Department of the salah azaiz Institute over 22 years (January 1999 – December 2021). The epidemiological and morphological characteristics and the different immunohistochemical panels used were analyzed.

Results: Fifty cases were included.Our patients were divided between 35 women and 15 men. Ages ranged from 3 to 82 years. Primary origin was identified in 94% of all cases studied. Epithelial origin was the most common, dominated by mammary primitive (26% of cases), followed by digestive primitive (18%),

genital (12%), urothelial (6%), thyroid (2%), and hepatic (2%). Carcinosarcoma was noted in 2% of cases. Non-epithelial tumors included sarcomas in 14%, phenotype B lymphomas in 10%, and cutaneous melanoma in 2%. CK7 and CK20 immunolabeling was used in 18 cases. The CK7-/CK20+ profile is observed in 4 out of 5 tumors of colorectal origin. Of 4 tumors of endometrial origin, 3 had a CK7-/CK20+ profile. All pancreatic tumors were CK7+/CK20- (4/4). Hormone receptors were positive in 61% of breast tumors. TTF1 was negative in 95% of the cases studied, and positive in the thyroid origin. **Conclusion**: Determining the histological type and origin of the different secondary bronchopulmonary tumors is essential to adapt the oncological treatment. The use of immunohistochemistry is common. However, aberrant immunohistochemical profiles may lead to misdiagnosis. Therefore, a clinical-pathological and radiological comparison is sometimes necessary to establish the diagnosis with certainty.

EVALUATION OF REAL-TIME PCR ASSAY FOR HUMAN PAPILLOMAVIRUS DETECTION AND GENOTYPING IN ARCHIVAL CERVICAL CANCER TISSUE.

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Introduction: Analysis of Human Papillomavirus (HPV) status on formalin-fixed paraffin-embedded (FFPE) samples is valuable for cervical cancer management. However, HPV genotyping using FFPE tissues is technically challenging. The aim of this study was to evaluate a Real-Time PCR (RT-PCR) assay to detect accurately High-Risk HPV (HR-HPV) in FFPE specimens of cervical cancer and compare the results with conventional PCR.
Methods: FFPE archived tissue blocks of cervical carcinomas diagnosed in the Department of Anatomical Pathology at Salah Azaiez Institute were recruited retrospectively from 2019 to 2024. DNA extraction was performed using the QIAamp DNA FFPE Tissue Kit. The HR-HPV detection was carried out using conventional PCR and the RT-PCR assay (GeneProof HPV Screening PCR kit).
Results: Our data revealed that RT-PCR and conventional PCR assays are reliable methods for HR-HPV detection and genotype determination in FFPE specimens, with high specificity. Results indicated that ten nanograms of DNA were sufficient for the HR-HPV detection in FFPE samples. Among all the cases tested, HPV-16 was the most detected common HR-HPV genotype. Interestingly, the GeneProof HPV Screening PCR kit has the advantage of higher sensitivity.
Discussion: This study demonstrated that the GeneProof HPV Screening RT-PCR assay can be recommended for HR-HPV detection and genotyping in FFPE samples and that HPV 16 is the most incriminated HPV type in Tunisia.
Key words: Cervical cancer; Human Papillomavirus; FFPE; RT-PCR; Genotyping.

METASTASES OF BREAST CANCER TO THE UTERINE CERVIX: CASE-SERIES WITH LITERATURE REVIEW

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Introduction: Breast cancer represents 30% of female cancers in Tunisia. The invasive carcinoma of no special type is the most common type. Distant metastases have predilection for the gastrointestinal tract, liver, bone and lungs. Genital tract is rarely affected. We report a case series of breast carcinomas metastatic into cervix.
Methods: Our study is retrospective, 6 cases of cervical metastases from breast carcinomas were gathered at the pathology department of Salah Azaiez Institute (08-24).
Results: Our series included 6 women with a mean age of 53 years (45-66 years). They all had a history of breast carcinoma and consulted for metrorrhagia. Patients had biopsies in 5 cases and total hysterectomy with bilateral adnexectomy in the 6th case. The histological examination showed a carcinomatous tumor located in the exocervical mucosa, arranged in clusters and cords. Tumor cells were CK7+, CK20-, ER+, PR+, GATA3+ on immunohistochemical staining. According to these findings, a mammary origin was retained.
Discussion: Breast metastases to the genital tract are rare. Lobular invasive carcinoma is responsible for most cases due to the inactivation of the CDH1 gene and loss of E-cadherin expression resulting in higher metastatic potential. In the female genital tract, ovaries are the most common metastatic site followed by vagina, uterus and cervix. Despite its rarity, metastatic breast cancer to uterine cervix must be kept in mind especially in case of history of breast carcinoma. Immunohistochemistry remains the key for diagnosis.

PTEN EXPRESSION IN COLORECTAL CANCER AND ITS ASSOCIATIONS TO CLINICOPATHOLOGIC FEATURES IN TUNISIAN PATIENTS

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Introduction: Colorectal cancer (CRC) is the third cause of death by cancer worldwide. Studying protein expression in CRC including PTEN and developing new therapeutics could improve patients' outcome. Our objective was to study PTEN expression in CRC in a Tunisian case series and its eventual association with clinicopathologic features.
Methods: It was a retrospective monocentric study at

the Pathology department of Salah Azaiez Institute using Tissue micro-array samples and immunohistochemical technics for studying PTEN expression in CRC.
Results: Our case series included 21 patients (12 males et 9 females). The mean age was 52,43-year-old. PTEN expression was retained in 71,43% of cases. An association between large tumour size (120 mm) and loss of PTEN expression was established ($p < 0,01$).
Discussion: Only an association between loss of PTEN expression and large tumour size could be established. Loss of PTEN expression in CRC could indicate an aggressive clinical course, impacting patients' prognoses and outcomes.

CYCLIND1 EXPRESSION IN COLORECTAL CANCER AND ITS ASSOCIATIONS TO CLINICOPATHOLOGIC FEATURES AND RAS GENE MUTATIONS IN TUNISIAN PATIENTS

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Introduction: Colorectal cancer (CRC) is a major public health problem due to its high morbidity and mortality worldwide. Understanding the mechanisms of CRCs' carcinogenesis and the signaling pathways, including CyclinD1, is important for the development of new effective therapies. Objectives of our study were to study the CyclinD1 expression in CRC in a Tunisian case series and identify its associations to clinicopathological features and RAS gene mutations.
Methods: A retrospective study including cases of CRC at Salah Azaiez Institute. An immunohistochemical study with anti-CyclinD1 antibody using the "Tissue Microarray" tool was made.
Results: Our case-series included 33 cases. The mean age was 58 years (38-77). CRCs were mainly located in the left colon and rectum. Tumor size was greater than 50mm in nearly 58% of cases. CyclinD1 expression was retained in 64% of cases. We found a statistically significant association between cyclinD1 expression and large tumor size ($p = 0.003$), presence of metastases at diagnosis ($p = 0.022$), and the time to onset of metastases of 1 year ($p = 0.03$). No statistically significant association was found between the mutational status of the RAS gene and CyclinD1 expression.
Discussion: Studies on the expression of CyclinD1 in CRC and its associations with anatomo-clinical aspects are rare. Understanding the carcinogenesis pathways involving CyclinD1 in CRC could help to develop a prognostic, and/or predictive biomarker of response to certain therapies. Our study should be consolidated by further studies in order to better understand CyclinD1 expression in CRC in Tunisian patients.

PERITONEAL TUBERCULOSIS VS. CARCINOMATOSIS: INSIGHTS FROM A CLINICAL CASE SERIES

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Introduction: Peritoneal tuberculosis (TBp) can present with symptoms that closely resemble those of peritoneal carcinomatosis, particularly in endemic regions. This overlap creates significant diagnostic challenges for clinicians.
Objective: This study aims to explore the diagnostic difficulties encountered in distinguishing between peritoneal tuberculosis and carcinomatosis, illustrated through a clinical case series of six patients presenting with abdominal pain.
Methods: We analyzed six female patients who presented with abdominal pain.
Results: Five of these patients exhibited lateral uterine masses and slight elevations in CA 125 levels. Preoperative imaging suggested malignancy, with significant adhesions and diffuse millimetric nodules observed during laparoscopic exploration. All patients underwent laparoscopic examination, which revealed extensive adhesions and multiple millimetric nodules throughout the peritoneum. All patients underwent laparoscopic exploration, during which an extemporaneous histological examination was performed on peritoneal samples. The extemporaneous examination suggested a tuberculous nature of the peritoneal lesions, which was later confirmed by definitive histopathological analysis, concluding the presence of peritoneal tuberculosis in all cases. Despite initial imaging indicating malignancy, the findings during laparoscopy, including extensive adhesions and millimetric nodules, highlighted the complexities of diagnosing TBp.
Discussion: The presence of lateral uterine masses and elevated CA 125 can mislead clinicians into diagnosing malignancy. The significant adhesions and millimetric nodules observed during surgery further complicate the clinical picture.
Conclusion: The findings underscore the critical need for awareness regarding peritoneal tuberculosis as a differential diagnosis when evaluating abdominal masses, especially in areas where tuberculosis is prevalent. Laparoscopy remains an essential tool for obtaining tissue samples for accurate diagnosis.

VALUE OF PREOPERATIVE NLR AND PLR IN PREDICTING PROGNOSIS OF EPITHELIAL OVARIAN CANCER

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Introduction: Epithelial ovarian cancer (EOC) remains the most lethal gynecologic malignancy. Partly, due to late-stage diagnosis and limited prognostic biomarkers. In recent years, Neutrophil-to-Lymphocyte Ratio (NLR) and Platelet-to-Lymphocyte Ratio (PLR) have garnered attention for their prognostic value in EOC. Several studies have investigated this correlation, none of which are tunisian, and the results are still controversial. **Objective**: This study was conducted to determine the prognostic

value of these markers in EOC and the cut-off values for our population. Methods: We retrospectively analyzed data from patients diagnosed with EOC between 2018 and 2022, at the HMPIT medical oncology department.
Results: Thirty patients were included with a mean age of 58 and a median follow-up of 24 months. The one and two year survival rates were 75.9% and 48.8% respectively. Patients with NLR<3 had significantly higher one and two-year survival rates at 92.9% and 77.4% respectively(p=0.004). In addition, those with PLR<200 showed significantly better one and two-year survival rates at 91.7% and 73.7% respectively(p=0.01).
Conclusion: Elevated NLR/PLR correlate with lower OS in EOC patients. They are economical and easily accessible through standard blood tests. Additional research is necessary to standardized NLR/PLR cut-off values and incorporate them into tailored treatment plans.

FLASH 8 GY IN THE TREATMENT OF METASTATIC SPINAL CORD COMPRESSION: EXPERIENCE OF THE TUNISIAN CENTER

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Introduction: Spinal cord compression (SCC) is an oncological emergency, involving various therapeutic modalities, notably radiotherapy (RT), to ensure both decompressive and analgesic goals. The aim of our study is to comparatively evaluate 2 hypofractionated regimens: 20 Gy in 5 fractions versus 8 Gy in a single fraction in the treatment of SCC.
Methods: Thirty patients with metastatic CM were collected in our department between 2019 and 2021. RT was delivered using the 3D conformal technique. Our work was based on a neurological clinical evaluation and pain assessment using the visual analogue scale VAS.
Results: The mean age of our patients was 61 (range 38-81 years), the sex ratio was 0.42, and the primary site was predominantly pulmonary in 70% of cases. General condition according to WHO classification was good (1-2) in the majority of our patients. Spinal cord compression was unique in 93.3% of cases, all revealed by spinal MRI. All our patients had visceral metastases. Revealing signs of SCC were spinal pain in 76.6% of cases, followed by paresthesia of the lower limbs in 46% of cases. The VAS score was mainly 6 in 46% of cases. Painkillers and corticosteroids were used systematically, with pregabalin when necessary. Nineteen patients were treated with systemic therapy and biphosphonates. No patient underwent laminectomy. Sixteen patients received a dose of 20 Gy in 5 Fr and the others received a flash of 8 Gy in a single session. Immediate clinical evaluation was carried out after three weeks: 93% of patients reported a clinical benefit, with symptomatology alleviation and improvement in pain VAS in 100% of patients in the 20 Gy in 5Fr arm, versus 92.8% in the flash arm. There was no need for re-irradiation in either arm. No clinical worsening was noted. RT was well tolerated regardless of the prescribed regimen.
Conclusion: The two RT protocols are equivalent in terms of local control of the metastatic site and quality of life (VAS). The 8Gy single-fraction regimen remains a validated, well-tolerated treatment option for metastatic CM, enabling us to reduce the duration of treatment and alleviate the overload on our machines.

CLINICO-BIOLOGICAL AND THERANOSTIC FEATURES OF OVARIAN CANCER

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Introduction: Ovarian cancer is the lethal gynecological malignancy. Its epidemiological profile is constantly evolving, but the last survey conducted in Tunisia was in 2014 by the Tunisian Cancer Registry. Objective: This study aims to provide insights into demographic trends, clinical features, and survival outcomes.
Methods: A retrospective study was conducted on patients diagnosed with ovarian cancer between 2018 and 2022 at the HMPIT. Data were collected on age, clinico-biological, histological, therapeutic features and survival rates.
Results: Thirty patients were included, with a mean age of 58, predominantly presenting with advanced-stage (III-IV) disease(60%). The most common histological subtype identified was the serous carcinoma(46,6%). The standard treatment plan involved surgical debulking, followed by platinum-based chemotherapy and a 12-month bevacizumab maintenance therapy. 50% of patients showed complete response to the treatment. The overall one-year survival rate was 75.9%, with significant correlations identified between survival rates and CA125 levels (p=0.013), stage at diagnosis (p=0.001), histological grade (p=0.025), and surgery type (p=0.036).
Conclusion: This study highlights the importance of early detection and the need for ongoing research into more personalized therapeutic approaches. Enhanced awareness and regular screening, especially for high-risk populations, could improve patient outcomes.

ASSESSING THE INFORMATIONAL NEEDS OF CANCER PATIENTS: A STUDY OF 100 CASES

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Introduction: With treatment advancements, cancer is increasingly managed as a long-term condition. Patients face physical, emotional, and psychological challenges related to the disease and its treatment. This study aimed to identify and prioritize their needs.
Methods: A descriptive cross-sectional study was conducted in the oncology department of Farhat Hached Hospital of Sousse. Patients completed a questionnaire addressing needs related to professional life, nutrition, physical activity, pain management, social adaptation, and sexual health.
Results: A total of 100 patients were included with

a median age of 53.5 years, [26–82] and a sex ratio of 0.4. Most patients were married (73%). Primary tumor sites were gynecological (66%), gastrointestinal (23%), and urological (11%). Disease was metastatic in 38% of cases. Key patient concerns included: • Nutrition: 62% expressed interest, significantly higher for digestive tumors (P=0.04). • Physical activity: 48% prioritized this, notably patients aged under 65years (P=0.04). • Pain management: 39% sought support, especially patients with genito-urinary cancers (P=0.016) and metastatic disease (P=0.03). • Social adaptation: 33% faced challenges, notably among single/divorced patients (P=0.03). • Sexual health: 30% reported concerns, higher in localized-stage cancers (P=0.006). • Professional life: 25% required guidance, especially those under 65years of age (P=0.03).

Conclusion: Nutrition, physical activity, and pain management emerged as the top priorities. Addressing these needs through personalized care strategies is essential to improve the quality of life for cancer patients.

PANCREATIC CANCER IN YOUNG PATIENTS: A COMPARATIVE STUDY WITH OLDER PATIENTS

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Introduction and aim: Recent data suggest a rising incidence of pancreatic cancer (PC) in young individuals. This study compares the clinicopathological features and outcomes of younger versus older PC patients to identify prognostic factors.

Methods: This retrospective comparative study included PC patients treated at the Farhat Hached medical oncology department (2009–2023). Patients were categorized into Group A (≤45 years) and Group B (>45 years).

Results: Among 200 patients, 29 (14.5%) were ≤45years. Preserved performance status was more frequent in Group B (63.5% vs 51.5%). Curative surgery was less common in Group A (19.9% vs. 32%), with higher relapse rates post-surgery (68.2% vs. 65.9%). Chemotherapy (CT) was administered to 85.1% of patients. Gemcitabine-cisplatin was the preferred neoadjuvant regimen in both groups. Fewer younger patients received first- and second-line palliative CT. Group A predominantly received LV5FU2-cisplatin as first-line palliative CT, whereas gemcitabine was more common in Group B. Radiological progression after first-line palliative CT was higher in Group A (90.9% vs. 86.9%) and universal after the second line (100% vs. 81.6%). Younger age did not significantly improve progression-free survival or overall survival (OS) (p=0.3).

Conclusion: Younger PC patients demonstrate a more aggressive disease course and higher relapse rates. While OS was comparable across groups, the distinct patterns of disease progression and treatment resistance in younger patients highlight the need for tailored, more aggressive therapeutic strategies.

MANAGEMENT OF CHEMOTHERAPY TOXICITY IN ELDERLY PATIENTS: A COHORT OF 100 PATIENTS

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Introduction and aim: Clinical trials have established that elderly patients can benefit from chemotherapy (CT) to a similar extent as younger patients. However, data on CT-induced toxicity in the elderly population remain limited.

Methods: A retrospective cohort study was conducted from January 2020 to December 2023. Patients aged ≥70 years with localized or metastatic solid tumors scheduled for CT were included.

Results: Of 100 patients, 77.7% underwent CT. The median age was 76 years [70–89], with 69% having at least one comorbidity. Poor performance status (PS=3–4) was observed in 8.2%. Common regimens included FOLFOX (9.6%), sequential [Epirubicin, Cyclophosphamide, Docetaxel] (13.5%), and Paclitaxel-Carboplatin (6,1%). Hematological toxicities included neutropenia (26%), with grade 4 neutropenia in 14% and febrile neutropenia in 4%. Non-hematological toxicities included fatigue (32%), neuropathy (26%), and vomiting (22%). Two toxic deaths occurred post-docetaxel injections. Sixty-two percent of patients completed treatment, with dose reductions in 24% and discontinuation in 14% due to severe toxicity, mostly within the first four cycles. CT was initiated at reduced doses (25–50%) in 48%, and prophylactic granulocyte colony-stimulating factor (G-CSF) was given to 8%, of whom only one developed grade 4 neutropenia.

Conclusion: Aging-related physiological change increase CT toxicity risk. Supportive measures, including prophylactic G-CSF, dose reductions, and close monitoring, are recommended to optimize outcomes in elderly patients.

SYSTEMIC TREATMENT COMPLIANCE IN ELDERLY PATIENTS: A REAL-WORLD CLINICAL TRIAL

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Introduction and aim: Despite the high prevalence of cancer in elderly populations, this group remains underrepresented in oncology trials, complicating the administration of optimal systemic therapies.

Methods: This retrospective descriptive study analyzed patients aged ≥70 years with localized or metastatic solid tumors who were planned to receive systemic therapy between January 2020 and December 2023.

Results: The cohort included 100 patients (sex ratio=1.25) with a median age of 76 years [range: 70–89]. Sixty-one percent had good performance status (PS= 0–1), and 69% had at least one comorbidity. The most frequent cancers were colorectal (25.2%), breast (19.2%), and gastrointestinal stromal tumors (14.3%). Disease was metstatic in 41% of cases. Systemic treatments included chemotherapy (77%), endocrine

therapy (18%) (aromatase inhibitors=12, tamoxifen=6), targeted therapy (4%) (imatinib=2, sunitinib=2), and immunotherapy (nivolumab=1). Treatment intent was adjuvant, neoadjuvant, palliative, or chemoradiotherapy in 30, 24, 38 and 8% respectively. Sixteen chemotherapy regimens were used. Treatment omission occurred in 32.3% of cases due to patient or family refusal (29.6%), poor performance status (PS ≥3) (22.2%), or death prior to therapy initiation (7.4%). Chemotherapy discontinuation occurred in 31.5% of cases, primarily due to severe toxicity (14.6%).
Conclusion: Aging-related physiological changes heighten toxicity risks with systemic therapies. Supportive care, including prophylactic granulocyte colony-stimulating factors and initiating reduced doses, is essential to mitigate toxicity and improve treatment compliance.

CLINICAL USE OF IMMUNOTHERAPY IN ONCOLOGY: A RETROSPECTIVE ANALYSIS OF EFFICACY AND TOXICITY AT SALAH AZAIEZ INSTITUTE

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Introduction and Aim: Immunotherapy has emerged as a pivotal treatment modality in oncology. This study aims to report the use and outcomes of immunotherapy in patients at our department.
Methods: We conducted a restrospective descriptive study at the Medical Oncology department of Salah Azaiz Institute including patients who received immunotherapy between 2020 and 2024.
Results: A total of 64 patients were included (31 males, 33 females) with with a median age of 57.5 years (range 28–78). The predominant malignancies were melanoma (32.8%), lung cancer (18.75%), triple-negative breast cancer (17.19%), and bladder cancer (15.62%). The majority (73.43%) had a metastatic disease. Pembrolizumab was the most commonly administered agent (45.31%), followed by Nivolumab (40.6%) and Atezolizumab (14.1%). Treatment regimens were predominantly monotherapy (73.44%). Combination with chemotherapy and Bevacizumab was observed in 23.44% and 3.12%, respectively. The mean number of cycles administered was 7.7 (range 1–40), over an average span of 6 months (range 1–42). The response rate (stable disease or partial regression) was 56.25%, with Pembrolizumab demonstrating the most favorable outcomes, in both the neoadjuvant and metastatic settings (p=0.07). Pembrolizumab was associated with a numerically higher incidence of toxicities (p=0.141). Most common toxicities observed were dysthyroidism (10.9%) followed by cytolysis, hyperkalemia, and hyperglycemia. Notably, only one patient experienced a grade 4 toxicity (pituitary failure with polyseritis). Vitiligo was observed in four patients treated with Nivolumab.
Conclusion: Immunotherapy, particularly Pembrolizumab, demonstrated promising therapeutic efficacy and a manageable toxicity profile across various cancer types. Monitoring for potential toxicities, especially in patients receiving Pembrolizumab, is essential to ensure optimal management during treatment.

DISPARITY OF TREATMENT AND OUTCOME IN ADOLESCENTS,YOUNG ADULTS AND CHILDREN WITH EWING'S SARCOMA

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Introduction: Ewing's Sarcoma (ES) is a rare malignancy that predominantly affects children with less favorable outcomes in adults. We aim to determine disparities in treatment and outcomes across age groups.
Methods: We conducted a retrospective study at the Salah Azaiz Institute including patients diagnosed and treated for Ewing's Sarcoma between 2001 and 2023.
Results: We included 76 patients (55 males, 21 females), with a median age of diagnosis of 15 years (±8.74). The lower limb was the most common tumor site (44%), followed by the pelvis (21.3%). Metastases were present in 17.3% of patients, more frequently in adolescents and young adults (AYA) (22%) compared to children (4.7%) (p=0.036). AYA had a significantly longer treatment initiation delay (8.5 weeks vs. 3.6 weeks in children, p=0.004). Relative-Dose-Intensity (RDI) ≥70% was achieved by 66.7% of children, 33.3% of adolescents, and none of the adults (p=0.02). Dose reduction was more frequent in children (64%) than adults (30%) (p=0.026). Surgical resection was performed in 86.7% of cases. Pathological response was good in 49.2% and poor in 50.8%, with good responses in 62% of children and 42.8% of AYA. Overall survival (OS) was significantly better in children, with a 5-year OS of 44.6%. AYA had a higher mortality risk (HR 4.08, 95% CI 1.23–13.52), with median OS of 148 months in children versus 28 months in AYA (p=0.012). Relapse occurred in 39.5%. Median progression-free survival (PFS) was 23 months, with a 3-year PFS of 49.3%. PFS was significantly poorer in AYA (11 months) compared to children (74 months) (p=0.001).
Conclusion: Outside the pediatric population, patients with ES continue to face challenges such as poor representation in large phase III trials, delayed treatment and reduced dose intensity.

MALNUTRITION IN PATIENTS WITH COLORECTAL CANCER:A COMPARATIVE STUDY

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Introduction: Several studies have demonstrated the detrimental effect of malnutrition on the vital prognosis of cancer patients. We aim to evaluate the nutritional state of cancerous patients.
Methods: A retrospective study was conducted at the

surgery department of La Rabta and the medical oncology department of Salah Azaiz Institute. We collected anthropometric data and nutritional assessment of patients with colorectal cancer aged above 30 and of a control group of non-cancerous patients. We used various assessment scores including MUST, MNA, SGA scores, NRI formula and CIQUAL table.

Results: We included 50 patients with colorectal cancer and 50 patients in the control group. Median age was 56 in cancer group and 52 in control group. Both groups were comparable in terms of comorbidities. Median age at diagnosis of cancer was 54±14,19 (26-74). Left colon was the predominant location (85,93%). Disease was predominantly stage IV (24%). Patients had a significantly higher BMI and were more likely to develop sedentariness (p=0.02 and p=0.003, respectively). Cancer patients had a higher risk of malnutrition. In fact, 80% of patients had a moderate to high risk of malnutrition according to the NRI score and 74% according to MUST score. This risk of malnutrition was correlated to duration of hospital stay (p=0.02). Insufficient caloric intake was observed in 94% of cancer patients (mean 1261.74 kcal/d vs 1765.8 kcal) (p<0.001). Insufficient protein and carbohydrate intake was observed in 32% and 92% of patients, respectively (p=0.007 and p=0.02). Martial deficiency, deficient intake of magnesium and vitamin B1 were more frequently observed in cancerous patients (p=0.02).

Conclusion: Anorexia was almost constant in our patients, and that almost 80% were at risk of moderate or severe undernutrition, irrespective of the score used. Early medical intervention accompanied by nutritional monitoring for patients is essential to prevent the onset of malnutrition.

NUTRITIONAL RISK FACTORS OF COLORECTAL CANCER:A CONTROLLED STUDY

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Introduction: Colorectal cancer is a worldwide problem. It is the second most frequent cancer in women and the third in men. The incidence of colorectal cancer has been rising steadily in recent years throughout the world. We aim to determine nutritional and environmental risk factors favoring carcinogenesis.

Methods: A retrospective study was conducted at the surgery department of La Rabta and the medical oncology department of Salah Azaiz Institute. We collected medical data and conducted a lifestyle and a nutritional survey in patients with and without colorectal cancer (CCR).

Results: Fifty patients were included in each group. Both groups were similar in age and gender distribution. Patients and control groups were comparable in terms of comorbidities. Rates of diabetes were 14% in patients' group and 15% in control group, and hypertension rate was 17% and 22%, respectively. Left colon was the predominant location (85,93%). Disease was predominantly stage IV (24%). After comparative analysis, in terms of nutritional factors, we found that a high consumption of red meat (both cooked and grilled) increased risk of CCR (p=0,006). Interestingly, more CCR patients consume black tea regularly (p=0.0001), in contrast with a higher green tea consumption in control group (p=0.003). Regular consumption of charcuterie dishes (p=0.002), offal-based dishes (p=0.002), fried dishes (p=0.0001) and sugar (p=0.0001) were significantly higher in CCR group while the control group had a more vegetable-based (p=0.001) and cereal-based diet (p=0.0001). Higher BMI was strongly associated to CCR (p=0.02) More post-menopausal women were present in the CCR group (p=0.006) Smoking and alcohol were not significantly associated to cancer. This could be either explained by a high frequency of smokers in the overall population or by the small size of our sample.

Conclusion: Our study suggests overweightness, menopause, over-consumption of red meats, fried dishes and black tea are associated to CCR. Weight loss and a vegetable and cereal-based diet are potentially protective nutritional factors.

PREDICTIVE FACTORS OF SURGICAL MORBIDITY, PATHOLOGICAL RESPONSE AND LOCAL RELAPSE AFTER NEOADJUVANT RADIO-CHEMOTHERAPY PROTOCOL RAPIDO IN LARC

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Introduction: Neoadjuvant radio-chemotherapy (RCT) has become a standard of care for LARC despite the lack of sufficient hindsight. In a resource-limited setting, the unavailability and overbooking of Radiotherapy (RT) encouraged the use of short-course therapy as per the RAPIDO trial.

Methods: A retrospective, monocentric study was conducted at the Medical Oncology Dpt. at the Farhat Hached University Hospital including LARC patients eligible treated with the neoadjuvant protocol RAPIDO, from Jan 2021 to Dec 2023.

Results: We included 52 patients. Baseline characteristics were: males=55.8%, median age 59.5 years (33-78); ECOG PS 1= 96.2%; mid-rectum= 61.5%, Stage III disease=80.8%; cT4=11.5%; cN2=26.9%. All patients were set to undergo a pelvic RT (25Gy in 5 fractions) and 9 courses of FOLFOX or CAPOX chemotherapy. Some patients (28.8%) received 4 cycles of FOLFOX while awaiting their scheduled RT. Premature interruption of neoadjuvant therapy was necessary in 13.5% of patients either for intolerance or surgical emergency. After RCT, 83% were operable. Resection was R0 in 87.17%. Post-operative complications occurred in 31.6% and were dominated by fistulae (33.3%), obstruction (33.3%) and sepsis (25%). They occurred in older patients (p=0.064), in low-rectal tumors (p=0.062) and in patients with comorbidities (p=0.047). pCR rate was 20.5% and MPR rate was 38.5%. They were correlated to completion of

the neoadjuvant treatment (p=0.041) and to downstaging on pre-operative MRI (p=0.049). After a median follow-up of 19.25 months, median PFS was 28 months, 3-year PFS rate was 71.2%. Relapse rate was 17.3% (9.6% Local and 7.6% distant). Local relapse was more frequent in female patients (p=0.09), after incomplete resection (p<0.001), non-pCR tumors (p=0.034) and in presence of lympho-vascular embolism (p=0.052).
Conclusion: Our population is subject to a high surgical morbidity in comparison to available data. Relapse is relatively high and long-term follow-up is necessary to determine the local control potential of this convenient short-course total neoadjuvant treatment.

STAPHYLOCOCCAL INFECTION OF IMPLANTABLE CHEMOTHERAPY PORT COMPLICATED BY ENDOGENOUS ENDOPHTHALMITIS

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Introduction: Implantable chemotherapy ports are commonly used in cancer patients for long-term intravenous access, but they carry a risk of infections, particularly nosocomial ones.
Methods: We report the case of a patient treated in the medical oncology department of Salah Azaiz Institute for breast cancer who has contracted a nosocomial infection via her implantable chemotherapy port. Case Report: This was a diabetic 60-year-old female patient undergoing adjuvant sequential chemotherapy for an early endocrine-receptor positive HER2 negative breast cancer. After 5 out of 6 cycles of chemotherapy, she was presented with a septic thrombosis of the implantable chemotherapy port, 5 days following the last injection of Docetaxel. Central and peripheral blood-culture isolated a Meticillin-S Staphylococcus aureus. Antibiotic therapy and anticoagulation were initiated shortly followed with removal of the implantable port. Workup with a full-body CT scan and a cardiac ultrasonography revealed a pulmonary staphylococcal disease. The patient developed a blurry vision on the 5th day of Cefazolin-Rifampicin-based antibiotic therapy and fundoscopy revealed a bilateral endogenous endophthalmitis. She underwent intravitreal injections of Vancomycin and Ceftazidime for 3 days in each eye. Regression of the blurry vision was spectacular and the patient was discharged after completion of 14 days systemic antibiotic therapy.
Conclusion: Implantable port infections are common complications seen in patients undergoing therapy. Workup in search of signs of infectious dissemination must be thorough and should include ophthalmologic examination.

PSYCHOLOGICAL DIFFICULTIES AMONG CANCER SURVIVORS DESCRIPTIVE STUDY ABOUT 110 PATIENTS TREATED AT FARHAT HACHED HOSPITAL (SOUSSE)

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Introduction: Return to normal life is not always easy for cancer survivors who are often confronted to psychological difficulties. The objective of this study is to evaluate the psychological difficulties during the after cancer period in patients treated in Farhat Hached Hospital.
Methods: A descriptive study about 110 patients in remission followed since 1997 for various neoplasias at the medical oncology department of Farhat Hached hospital in Sousse. Patients are currently under regular surveillance and the end of treatment was at least 6 months ago. Data were collected using a self-administrated questionnaire.
Results: The majority of patients were female (90). The current average age was 56 at the the moment of the study and 49 years at diagnosis. The majority (71) were married. Most patients had 2 children. All the patients suffer from psychological difficulties. In fact, 50 patients had fear from the future, 26 had worries about their children. We noticed that 28 patients suffered from depression, 30 from anxiety and 15 started crying during the questionnaire. The majority of patients (106) were psychologically supported, and 4 needed help. This support was provided by family in 99 patients, friends in 19, partner in 69, psychologist in 1 and work colleagues in 1 patient. 29 patients were very grateful after illness to God, life and their family members. Nearly half the patients (52) declared that they had returned to a totally normal life with an average time of 99 months.
Discussion- conclusion: This study shows the frequency of psychological disorders among our patients so a special attention must be paid to this aspect in their cares.

REAL-LIFE DATA : BIOLOGICAL PROFILE OF NSCLC IN THE NORTH-CENTRAL REGION OF ALGERIA (EGFR, ALK AND PDL-1)

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Bronchopulmonary cancer (BPC) relates to a major public health issue due to its frequency and poor prognosis. In Algeria, like other parts of the world, it is the first cause of death by cancer. Environmental and genetic factors lie behind its widespread all around the world. During the last decade, much research was published about molecular alterations in lung cancer. Several predictive biomarkers of therapeutic efficacy have emerged for NSCLC, including mutations in EGFR, alterations in ALK gene, rearrangements, and expression levels PD-L Determining the molecular biomarkers plays a crucial role when choosing a therapeutic option for a patient

with NSCLC. The objective of the present study is to determine the biological profile of patients with locally advanced or metastatic NSCLC in the north central region of Algeria, in addition to updating the epidemiology of cancers in Algeria by introducing molecular data. A sample of 514 patients was selected for the study. the participants were patients with locally advanced or metastatic NSCLC receiving treatment in 15 centres from April 01st, 2020 to December 31st, 2021, their mean age is 63 years old. As regards gender, 77.2% of the participants were male; the sex ratio is 3.4. 86.6% were adenocarcinoma, 44% were non - smokers and 84.4% are metastatic from the outset. The positivity rate for the EGFR mutation was around 20.7%, mainly for women, ADKs and non-smokers. Patients with a tumor carrying an EGFR mutation and who received first-line targeted therapy had a clear benefit in terms of objective response rate and overall survival. A strong expression of PDL-1 ≥ 50% was found in 31% who received chemotherapy, in the absence of immunotherapy, the rate of progression of the disease in this subgroup is around 36.5%. Of the 37 patients who took a test to check the ALK rearrangement, 3 were positive. The present study has enabled us to collect a great deal of data, to show the importance of determining biomarkers as well as the establishment of a bioguided treatment in the management of the patients, nevertheless, it would be interesting to enlarge the scope of the study throughout the national territory in order to get more reliable and valid results. In order to offer equal opportunities to our patients, medical testing should be implemented in all pathology institutes involved in the treatment and the management of lung cancer.

IMPACT OF 18F-FDG PET/CT FOR PATIENTS WITH RADIOIODINE REFRACTORY THYROID CANCER

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Introduction: Differentiated thyroid carcinoma (DTC) becomes radioiodine refractory (RIR) in 10% of cases, with high serum thyroglobulin levels despite a negative 131I whole body scan (WBS). In this case, when morphological imaging are non conclusive, 18FDG-PET may be usufull.
Aim: To assess the clinical value of 18FDG-PET in patients with RIR thyroid cancer.
Methods: It was a retrospective study of 18 patients with RIR thyroid cancer presenting negative 131I WBS and a normal CT scan, who underwent 18FDG-PET/CT from Sep 2020 to July 2022 in nuclear medicine departement of Salah Azaiez Institute.
Resultats: Eigtheen patients (66.7% women), with a median age of 55 years [19-65]. 18FDG-PET/CT was positive in 10 patients (55.6%). It showed lymph node recurrence in 4 patients who underwent surgical resection, 1 patient with localized bone involvement who was treated with radiotherapy, 1 patient with lymph node recurrence and lung involvement localized to a single lobe who underwent functional curage and stereotactic pulmonary radiotherapy. the remaining patients with positive 18FDG-PET/CT had multiple pulmonary and bone lesions and were presented for targeted tyrosine kinase inhibitor therapy. False negative cases were related in 2 patients with small pulmonary lesions. Analysis by lesion showed that the sensitivity, specificity, PPV and NPV of 18FDG-PET/CT were 94.1%, 83.3%, 88.9% and 90.9% respectively. The sensitivity of our exam was 50% for serum Tg levels between 5 and 10, and 64.3% for levels over than 10 ng/mL.
Conclusions: 18FDG-PET/CT is a useful diagnostic tool in patients with iodine-refractory CDT to improve their management.

HOW NECESSARY IS THE INTRAOPERATIVE FROZEN SECTION IN THYROID PATHOLOGY ?

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Introduction: Although frozen-section examination (FSE) helps in managing thyroid nodules, its role remains controversial. This study aims to evaluate the concordance between FSE and final histology diagnoses in thyroid pathologies.
Methods: We reviewed thyroid resections sent for FSE at our Pathology Department from January 1, 2023, to October 1, 2024. FSE performance was assessed using sensitivity (Se), specificity (Sp), positive (PPV) and negative (NPV) predictive values, accuracy, and kappa coefficient.
Results: We analyzed 227 thyroid resection specimens sent for FSE. The specimens included right lobo-isthmectomies (38.3%), left lobo-isthmectomies (31.7%), total thyroidectomies (28.6%), and isthmectomies (1.4%). The FSE was carried out for 244 cases: In 17 cases, it was performed for two different lesions. FSE results were benign in 40.6%, malignant in 13.1%, and indeterminate (ARAP) in 46.3% of cases. Final diagnoses were benign in 56.5%, malignant in 32%, tumors of uncertain malignant potential in 7% and NIFT-P in 4.5% and of cases. FSE showed Se=28.3%, Sp=99.3%, PPV=96.8%, NPV=64.3%, accuracy=68.4% and kappa coefficient=0.3. Discussion: FSE in thyroid pathologies had a high specificity (99.3%) indicating strong reliability for confirming malignancy. However, its low sensitivity (28.3%) suggested limited effectiveness in ruling out benign cases. These findings align with previous studies. The kappa coefficient (0.3) indicated fair agreement between FSE and final diagnosis. The discordance was mainly due to sampling issues. Besides, FSE had low diagnostic performance in lesions with a thyroid follicular pattern.
Conclusion: Although FSE offers high specificity for diagnosing malignancy, it contributes minimally to improving the diagnostic accuracy of thyroid. Do these results encourage abandoning its routine use? Further research is needed to better define its role in thyroid pathologies.

COMPARATIVE ANALYSIS OF KI-67 EXPRESSION IN BREAST CANCER: CORE NEEDLE BIOPSY VS SURGICAL EXCISION

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Introduction: Ki-67 is a crucial biomarker for assessing tumor proliferation in breast cancer, helping in treatment decisions and risk stratification. Our aim is to compare the Ki-67 expression between core needle biopsies (CNB) and surgical excisions (SE) to determine the necessity of repeating Ki-67 on SE.
Methods: We included patients who underwent both biopsy and primary surgery for invasive breast cancer, at MTM hospital, between January 2020 and December 2022. We applied a 20% ki-67 index to define low versus high groups. Ki-67 concordance between CNB and SE was evaluated using Student t test and kappa coefficient.
Results: A total of 48 paired samples of CNB and SE were analyzed. The mean Ki-67 index for CNB was 24.4±17.1%, while for SE, was 24.1±18). Paired t-test was 0.11 (p=0.91). The correlation coefficient between the Ki-67 of biopsies and excisions was 0.39, indicating a moderate correlation (p=0.005). Kappa coefficient was 0.6 (p=0), indicating moderate agreement.
Discussion: Our results indicated no significant difference in Ki-67 between CNB and SE. The moderate but significant correlation and the kappa coefficient illustrated that CNB can provide reliable information on Ki-67 expression. These findings were consistent with previous studies. The differences may be explained by the worse fixation quality and the intratumoral heterogeneity.
Conclusion: Our results suggest that it may not be necessary to routinely repeat Ki-67 on SE if reliable CNB results are available. This approach can lead to cost savings and improve the efficiency of managing breast cancer patients. However, further studies with larger samples are needed to confirm these results.

EXPLORING THE INTERPLAY BETWEEN BODY IMAGE AND SEXUAL HEALTH IN MASTECTOMIZED BREAST CANCER SURVIVORS: A CROSS-SECTIONAL STUDY AT CHU HABIB BOURGUIBA, SFAX

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Introduction: Breast cancer, the most common malignancy in women, impacts physical and psychological well-being. Mastectomy, a standard treatment, often alters body image and sexual health, causing emotional and physical effects.
Methodology: A cross-sectional descriptive-correlational study involving women mastectomized conducted at the oncology unit at Habib Bourguiba University Hospital. Data collection employed validated tools: Female Sexual Function Index (FSFI) and Body Image Scale (BIS).
Results: Sixty patients were included with a median age of 45 years [20-65]. The disease was unilateral in 92% and localized in 93%. Body image disturbances were observed in this population, with a mean BIS score of 17.433 ± 4.92. Younger women and those with higher educational levels exhibited relatively better self-perceptions. Conversely, women with advanced disease and more invasive treatments reported significantly altered body images. Sexual dysfunction was noted, with a mean FSFI score of 28.45 ± 21.06. The most affected domains were desire (3.85±1,96), lubrication (4,53±4,93) and satisfaction (67%). The prevalence of body image disturbance was 95% as assessed by the BIS score. The prevalence of altered sexuality using the FSFI Score was 45%. Dyspareunia was reported by 45%. Frequency of sexual activity declined in 53%. In bivariate analysis, a significant inverse correlation was found between BIS and FSFI scores (p = 0.017). Body image disturbances were identified as a primary factor contributing to the increased perception of sexual dysfunction.
Conclusion: Body image disturbances and sexual dysfunction in mastectomized breast cancer survivors are correlated, causing psychological distress. Long-term follow-up, awareness, and communication are key to improving their well-being.

THE USE OF ANTIBODY-DRUG CONJUGATES FOR THE TREATMENT OF HER2-POSITIVE BREAST CANCER: THE SALAH AZAIEZ ONCLOLOGY DEPARTEMENT EXPERIENCE

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Introduction: Approximately 15-20% of breast cancers demonstrate HER2 gene amplification. Before the era of HER2-directed therapies, this molecular subtype was associated with poor prognosis. Anti-HER2 agents dramatically changed the natural course of metastatic breast cancer (MBC) and significantly prolonged patients' survival. We aimed to assess the outcomes of metastatic patients treated with trastuzumab emtansine or trastuzumab deruxtecan.
Method: A monocentric retrospective study over a period of 3 years from Jun 2021 to October 2024 was conducted at the oncology department of Salah Azaiez Institute. The study enrolled 51 patients with HER2-positive MBC who received second line and more, antibody-drug conjugates(ADC) (trastuzumab emtansine and/or trastuzumab deruxtecan). All data regarding patients were obtained from the medical record.
Results: Fifty-one patients were treated with ADC. The median age was 52 years. Trastuzumab emtansine was used in second line and more in 44 patients. 11 patients (25%) progressed on TDM-1 while 15 patients(34.1%) had tumor stability , 18(40.9%) lost to follow-up. The progression-free survival(PFS) was 6.7 months. Trastuzumab deruxtecan was used in second line in 7 patients and in third line in 6 patients (after progression

on Trastuzumab emtansine) . Only 2 patients progressed on Trastuzumab deruxtecan : one patient had controlled brain metastasis and one died due to respiratory distress.
Conclusion: Although these therapies have improved MBC management and patient outcomes, resistance can develop, reducing effectiveness. Personalized strategies based on tumor characteristics offer hope for better responses and longer outcomes.

PROFILE OF BRONCHIAL CANCER IN WOMEN: EXPERIENCE OF THE MEDICAL ONCOLOGY DEPARTMENT, EHU ORAN

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Introduction: Lung cancer is the leading cause of cancer-related mortality in men, but its incidence is rising in women, especially for non-small cell lung cancer (NSCLC). This reflects disease heterogeneity and diverse risk factors. This study aims to describe the clinical, histological, and therapeutic characteristics of lung cancer in women from western Algeria.
Methods: A retrospective study was conducted on cases of bronchial cancer in women managed by the Medical Oncology Department at EHU Oran between January 2016 and December 2022.
Results: Twenty-six cases of bronchial cancer in women were recorded. The average patient age was 58 years (39–72 years), with passive smoking exposure in 41% of cases. The main symptoms were chest pain and cough (41% each), with an average consultation delay of 4 months. Histological diagnosis was made through bronchial biopsy (14 cases), CT-guided transthoracic biopsy (11 cases), and lymph node biopsy (1 case). Adenocarcinoma was the predominant histological type (66%), with an EGFR mutation identified in one case. All patients were diagnosed at stage IV. The most common metastatic sites were the pleura (33%), bones (25%), lungs (16%), and lymph nodes (16%). Treatment included palliative chemotherapy (83%) and symptomatic management (17%).
Conclusion: Lung cancer in women is no longer solely linked to smoking. Genetic, constitutional, and hormonal factors likely play a role. Adenocarcinomas, more frequent in women, respond better to oncological treatments. However, late-stage diagnosis contributes to a poor prognosis. Keywords : bronchial cancer, women.

USEFULNESS OF PRACTICING SYSTEMATIC CAVITY SHAVING DURING CONSERVATIVE BREAST CANCER SURGERY: A RETROSPECTIVE STUDY

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Introduction: The condition of the surgical margins in lumpectomy specimens is a key factor influencing the likelihood of local recurrence in the management of breast cancer. The effectiveness of systematic cavity shaving remains a topic of discussion. This study sought to examine the degree to which systematic shaving improves margins deemed insufficient and to identify a specific group of patients for whom this approach may be beneficial.
Methods: This is a retrospective, analytical study conducted at a single center in the Gynecology department of Charles Nicolle Hospital. Systematic shaving was deemed effective if it corrected positive or inadequate margins, thereby eliminating the need for further surgical procedures.
Results: A total of 93 patients were enrolled in the study. Positive shaving results were observed in 20 patients, accounting for 21.5% of the cohort. Among those with tumor-free margins, 4 patients exhibited a positive shaving result, representing 4.3%. No correlation was found between the amount of tissue resected and the effectiveness of the shaving. Furthermore, the multivariate analysis did not reveal any predictive factors related to the positivity or effectiveness of the shaving procedure.
Discussion: Although recent randomized studies show that cavity shaving margins reduce re-excision rates. In our study, a rate of 10.8% for useful shavings allows us to recommend this procedure, as it prevents a surgical revisit in 1 out of 10 patients. Given this data and the literature that evaluates this utility between 29% and 66%, we recommend that practitioners assess its usefulness based on our findings.

THERAPEUTIC RESULTS OF SYMPTOMATIC STAGE III/IV INDOLENT B LYMPHOMAS: A SINGLE CENTER EXPERIENCE

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Introduction: Treatment of indolent lymphoma has improved significantly in recent decades since the advent of Rituximab. The combination of Rituximab with chemotherapy provides a higher rate and duration of response than chemotherapy alone. The aim of this study was to analyze the therapeutic results of symptomatic stage III/IV indolent B lymphoma (SIBL).
Methods: We reviewed retrospectively the records of 22 patients presenting with SIBL treated between 2014 and 2022. These patients were treated with Rituximab and chemotherapy either CHOP (Cyclophosphamide, Doxorubicin, Vincristine, Prednisone) or COP (Cyclophosphamide, Vincristine, Prednisone). In case of mantle or follicular lymphoma, Rituximab may also be indicated as a maintenance treatment every 2 months during 2 years.
Results: The median age was 57.5 years old. Follicular lymphoma represented 50% of cases, mantle lymphoma 25% and lymphocytic lymphoma 25%. 60% of tumors

were classified in stage IV. Peripheral lymph node involvement was found in 70%. Liver involvement was present in 10%. Two patients had associated solid cancers (rectal adenocarcinoma and anal melanoma). 90 % received R-CHOP regimen with 8 cycles in 58%. The objective response rate was 85% with complete response in 25%. Salvage chemotherapy type R-DHAP (Rituximab, Dexamethasone, Cytarabine, Cisplatin) was indicated in 28%. Median disease-free survival was 18 months. The 5-year overall survival was 66.7%.
Conclusion: According to the literature, the overall objective response rate of this entity is around 50% (27 to 62%). In our study, it was a little better which can be explained by the use of CHOP-based chemotherapy in the majority of cases.

IMMUNE CHECKPOINT INHIBITORS: TOXICITY PROFILES AND MANAGEMENT AT THE ONCOLOGY UNIT OF HABIB BOURGUIBA UNIVERSITY HOSPITAL

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Introduction: Cancer immunotherapies have revolutionized cancer treatment by harnessing the immune system to target tumors. However, their unique mechanisms of action can cause immune-related adverse events (irAEs) that affect multiple organs, presenting significant clinical challenges.
Methodology: We conducted a retrospective study at the oncology unit at Habib Bourguiba University Hospital, including patients who were treated with immunotherapy between 2023 and 2024.
Results: Nine patients were included , with a mean age of 58 years and consisted of 3 females and 6 males. The primary cancers included melanoma (4 patients), non-small-cell-lung cancer (4 patients), and colon cancer (1 patient). Seven patients had metastatic disease. Notable comorbidities included hypertension (3 patients), cardiovascular disease (3 patients), and hypothyroidism (2 patients). Four patients were smokers. Immunotherapy treatment consisted of pembrolizumab in 7 patients and atezolizumab in 2 patients and was administered in an adjuvant setting in 1 patient and for metastatic disease in the remaining 8 patients. The average number of infusions was 4.7. Four patients presented irAEs. These included hypothyroidism in 3 patients (grade 2 in 1 patient and grade 1 in 2 patients), asthenia (grade 1) in 2 patients and one case of grade 2 hand-foot syndrome. One patient developed grade 2 drug-induced hepatitis, another a grade 2 nephritis both improved with corticosteroid therapy. One patient experienced spondyloarthropathy, which improved with analgesic treatment and physiotherapy.
Conclusion: Anti-PD-1/PD-L1 therapies have transformed cancer care but can cause irAEs. This highlight the need for personalized monitoring and management to optimize treatment and ensure patient safety.

ASSESSMENT OF QUALITY OF LIFE IN CANCER PATIENTS UNDERGOING CURATIVE RADIOTHERAPY: A SINGLE INSTITUTIONAL TUNISIAN EXPERIENCE

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Introduction: Cancer is often perceived as an image of death and catastrophe, thus having a significant impact on the quality of life of patients undergoing various treatments for cancer. Quality of life (QOL) is a crucial parameter to be evaluated as well as survival outcomes. Objective: In this study, we proceeded to evaluate the QoL among 30 cancer patients undergoing curative radiotherapy (RT) using the EORTC : Quality of Life Questionnaire Core 30 (QLQ C-30).
Methods: We prospectively evaluated the quality of life of cancer patients undergoing curative RT at the radiotherapy department of Farhat Hached Hospital . The QLQ C-30 questionnaire was used including multiple domains assessing physical, role, emotional, cognitive and social functioning.
Results: A total of 30 cancer patients undergoing curative RT were included in the study, the patients undergoing palliative treatment were excluded. The mean age was 55years old [19-76] .The sex ratio was 0.5. The average of functional scales was70 %. The Emotional functioning scores are the most who demonstrated a decline during treatment with an average of .55%. Conversely, cognitive scales demonstrated the highest preservation, with a score of 78%. Symptom scales, encompassing fatigue and pain, were rated equally at 33.3%. Financial aspects were rated at 37%. Overall, patients rated their global health at an average of 60%." In conclusion, Despite the emotional toll of treatment, patients exhibited resilience, with overall global health rated at 60%. which is globally acceptable. Symptom management, financial concerns, and gender disparities were notable aspects affecting QoL. Tailored supportive interventions addressing these factors are important for optimizing QoL outcomes in cancer patients undergoing radiotherapy.

18F-FDG PET-CT ON M STAGING IN NON-SMALL CELL LUNG CANCER: A COMPARATIVE IMAGING STUDY

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Planning a treatment for non-small cell lung cancer (NSCLC) requires precise staging. When compared to traditional imaging modalities, this study assesses the contribution of 18F-FDG PET-CT to the refinement of M status. 103 NSCLC patients who were referred to the Salah Azaiez Institute's Nuclear Medicine Department in Tunis for disease stratification were included in this retrospective research. Prior to PET-CT, all patients had conventional imaging, and the kappa coefficient was used to evaluate the concordance between PET-CT and CT. Males made up the majority of the cohort (sex ratio 11.9),

and the mean age was 64 years. Most patients (83.2%) smoked regularly. After initial staging by conventional imaging (computed tomography and in some cases bone scintigraphy and MRI) patients were classified as non-metastatic in 56, M1a in 18 cases, M1b in 17 cases, M1c in 10 cases, and 2 unclassified (Mx). PET-18FDG led to change in the metastatic status in 38 patients (36.9%), 19 patients (18.4%) were upstaged, 16 (15.6%) were downstaged, and the unclear instances were resolved. PET-18FDG highlighted 11 bone metastases, 7 adrenal lesions, and 7 other lesions, while excluding 8 bone metastases, 1 adrenal lesion, and 2 other lesions. After PET-18FDG patients were classified as non-metastatic in 57 cases, M1a in 19 cases, M1b in 11 cases, and M1c in16 cases. With a 63.1% agreement rate, PET-CT and CT showed moderate concordance (κ = 0.42, p < 0.005). PET-CT showed better sensitivity over conventional imaging and significantly influenced therapeutic decision-making.

SHOULD WE CHANGE OUR MANAGEMENT OF LOCALLY ADVANCED CERVICAL CANCER BASED ON THE RESULTS OF THE INTERLACE TRIAL ?

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Introduction: The role of neoadjuvant chemotherapy (CT) was investigated in order to improve prognosis of locally advanced cervical cancer (LACC) patients. In this area,the INTERLACE trial showed an overall survival benefit with induction CT utilizing at least 5 cycles of carboplatin-paclitaxel vs standard treatment. We aim to highlight the practice-changing in LACC management.
Methods: We report a case of LACC treated in the radiation oncology department, Farhat Hached hospital, Sousse, Tunisia in 2024 according to INTERLACE trial protocol with literature review.
Results: A 42-year-old female was referred to our department due to stage IIIC2 cervical Cancer.The 18 FDG PET/CT documented a solid lesion (38*24*33 mm) developing from the posterior portion of the uterine cervix to the vaginal upper third with regional pelvic and paraaortic lymph nodes involvement.She underwent induction CT (5 cycles of carboplatin-paclitaxel). The control MRI showed a complete response in the tumor and the lymph nodes excepting a unique centimetric internal iliac lymph node. After a carefully discussion in a multidisciplinary team meeting, she underwent a concomitant radiochemotherapy and she is in complete remission after 3 months of follow up.
Conclusion: Certainly, results of INTERLACE trial are interesting. However, it concerned especially early-stage disease I-II in 86%. The details regarding radiation are minimal making the task of the radiation oncologist very difficult, especially in terms of target volumes planning after total response to CT. Therefore, further prospective clinical researchs are needed.

BREAST AND THYROID CARCINOMAS ASSOCIATION IN WOMEN

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Introduction: Both Breast cancer (BC) and Thyroid cancer (TC) are common malignancies among women. These cancers often occur metachronously. Our aim was to study clinical, paraclinical, management and prognostic particularities of patients presenting with both BC and TC.
Methods: A retrospective study including women managed at the Salah Azaiez Institute for BC and TC, between 2021 and 2023.
Results: Eight patients were included. Mean age was 55 years [42 – 73]. One patient had a medical history of cervical cancer. Main symptom was a breast lump in 6 patients. BC was diagnosed before the TC in 5 patients and simultaneously in 3 patients. Mean delay between the diagnosis of the two cancers was 5 years [2 months – 15 years]. Two patients had a bilateral BC. Discovery of the thyroid nodule was incidental on the radiological follow-up in 3 patients. All patients were operated on for both cancers. Most frequent histological BC and TC types were respectively invasive ductal carcinoma of the breast (6 patients) and papillary thyroid carcinoma (7 patients). For the BC, chemotherapy was indicated preoperatively in 4 cases and post-operatively in 2 cases and 5 patients had adjuvant radiotherapy. For the TC, 4 patients had radioiodine (I131) therapy. Mean follow-up was 12 months with an overall survival at 1 year estimated at 75%.
Conclusion: A correlation between BC and TC has been established in several studies. Common genetic and hormonal factors are suspected. Identifying these factors may be useful to develop new therapeutic strategies.

PARENTS' SATISFACTION WITH CANCER CARE: TOWARD DYNAMIC IMPROVEMENT OF CHILDHOOD CANCER CARE AT THE RADIOTHERAPY WARD OF SALAH AZAIEZ INSTITUTE, TUNISIA

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Introduction: Improving parent's experience in cancer care can enhance patient engagement and ultimately result in better medical care, particularly in the unique context of pediatric oncology This study aims to assess parents' satisfaction with quality of care in pediatric oncology.
Methods: The EORTC PATSAT-33 tool was conducted to assess parent's perceptions of the quality of childhood cancer care at the Radiotherapy ward of Salah Azaiez Institute.
Results: A total of 26 participants were included, the

majority were female (88.5%). The mean age of the children was 7.9 years. Participants reported being very satisfied with care delivery, with a mean score of overall satisfaction at 92.3%. Items with the highest mean scores were related to doctors' technical skills and information exchange, with mean scores of 96.48% and 94.47%, respectively. Parents were satisfied with their involvement in decision-making regarding the child's treatment with a mean score of 93.26%. Parents reported being satisfied with teamwork, with mean score of 88.46%. Parents were highly satisfied with the cheerfulness of the healthcare staff, as well as with the doctors' affective behavior, mean scores were 91.34% and 91.96%, respectively. The three items with the lowest mean scores were the waiting time for treatment, access to the hospital, and the ward environment, mean scores were 65.38%, 59.61%, and 72.11%, respectively.
Conclusion: Parent satisfaction with childhood cancer care is one major aspect to monitor care improvement initiatives. Cheerfulness, waiting time and teamwork may have a significant impact on overall parent experience in childhood cancer care.

BURDENS OF RADIO-IODINE REFRACTORY DIFFERENTIATED THYROID CANCER IN UNDER DEVELOPED COUNTRY: A TUNISIAN SINGLE-CENTER EXPERIENCE

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Introduction: Prognosis of differentiated thyroid carcinoma (DTC) is favorable even with distant metastasis. Nevertheless, 5 to 15% of DTC will become refractory to radio-iodine (RAIR) causing significant decrease in survival rate and burdensome management.
Methods: Retrospective study including 10 patients diagnosed and treated for RAIR DTC between 01/13 and 01/2020 in Salah Azaez Oncology Institute.
Results: The median age was 55 [40-71]. The sex-ratio was 1.5. All patients had total thyroidectomy (TT) with central neck dissection. Lateral neck dissection was performed in 3 patients. There were 9 papillary DTC (classic = 2, Hürthle cells=2, tall cells=4) and 1 follicular DTC with vascular invasion. Initial T stage was T1 in 3 patients, T2 in 4, T3 in 2 and T4 in 1. The N stage was N1a in 4 patients and N1b in 4. The cumulative median activity was 459mCi [870-230].The median number of RAI treatments was 4 [2-8]. The median delay from diagnosis to RAIR was 11months [3-19]. Two patients showed pulmonary metastasis at the first I-131 uptake. Only one patient beneficiated from PET FDG scan. Eight patients were reoperated (3 central compartment reoperations, 5 picking nodes, 4 lateral compartment reoperations). Decompressive Radiation therapy was performed in 3 patients. No patient had tyrosine-kinase inhibitor (TKI) treatment. The median follow up was 7.8 years [4-11]. Two patients died from the disease (1 from anaplastic transformation, 1 from cerebral metastasis).
Conclusion: A new adjustments should be undertaken concerning the therapeutic approach of RAID-DTC to reduce the management cost and improve the survival.

PAPILLARY CARCINOMA OF THE THYROGLOSSAL DUCT CYST: A CASE-SERIES OF FIVE PATIENTS

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Introduction: Thyroglossal duct cysts (TGDCs) are common developmental anomalies of thyroid gland and represent the most common cause for congenital neck masses. However, malignant transformation is a rare occurrence representing less than 1% of cases. Our objective was to describe the clinicopathological aspects of this rare entity in a case-series from our institution.
Methods: Records of patients diagnosed with carcinomas of the thyroglossal duct cyst at the Pathology Department B of Salah-Azaeiz Institute of Tunis between 1998 and 2024 were retrospectively reviewed.
Results: Five patients (3 females, 2 males) aged 17–86 years (mean age: 50.4 years) were identified (incidence rate: 7%). Definitive histological examination revealed classic papillary carcinoma in all five cases. Two cases involved microscopic foci of carcinoma whereas the other cases involved macroscopically identifiable tumors (mean size:15 mm). The Sistrunk procedure was performed on all five patients. Three required additional total thyroidectomy, which did not reveal carcinoma foci in the thyroid specimens. Neck dissection was performed in three cases and revealed metastasis to regional lymph nodes in one case. Two cases showed extension to adjacent skeletal muscle and soft tissue. A synchronous squamous cell carcinoma of the larynx was diagnosed in one patient.
Discussion/Conclusion: Normal thyroid tissue in TGDCs has the potential to harbor malignancy. Classical papillary carcinoma is the most common type occurring in middle-aged women. This disease is generally indolent in younger patients. Our case-series highlights the rare but significant occurrence of malignant transformation in TGDCs and emphasizes the importance of thorough histopathological evaluation in the management of patients.

ROSAI-DORFMAN DISEASE OF THE BREAST: ABOUT FOUR CASES

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Introduction and aims: Rosai-Dorfman disease (RDD) is a rare histiocytic disorder primarily affecting lymph nodes, though it can occasionally involve extra nodal sites. RDD of the breast is quite uncommon and can present with worrisome clinical and radiological features that can

mimic a malignant process. The aim of our study is to describe the epidemiological, clinical and histological aspects of RDD of the breast.
Methods: A retrospective and descriptive study including all histologically confirmed cases of RDD of the breast seen between 2022 and 2024 was conducted. Patient records were reviewed to identify epidemiological, clinical and histological characteristics.
Results: A total of 4 patients were included. Patients aged 26 to 59 years, presented with unilateral and unifocal palpable masses. Systemic RDD was noted in one case and was confined to the breast in three cases. Masses ranged from 20 to 60 mm, categorized Breast Imaging-Reporting and Data System (BI-RADS): 3 (1/4), 4 (2/4). All patients underwent complete excision with anatomopathological evaluation. All cases showed similar morphology with many large histiocytes displaying emperipolesis with associated fibrosis and dense lymphoplasmacytic infiltrate. The abnormal histiocytes co-expressed CD68, S100, and were negative for AE1/AE3 and CD1a.
Discussion/Conclusion: In summary, breast RDD should be included in the differential diagnosis of a mass-forming breast lesion. Histopathology with ancillary studies and clinicoradiologic correlation is essential for accurate diagnosis and optimal clinical management. Patients with RDD of the breast have an excellent prognosis after complete excision.

CYTO-VIRO-COLPO-HISTOLOGICAL CONFRONTATION IN CERVICAL CANCER SCREENING

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Introduction: Cervical cancer remains one of the most common cancers worldwide. Primary prevention focuses on vaccination against human Papillomavirus (HPV), while secondary prevention includes a cyto-colpo-histological approach along with virological diagnostics. This study analyzed epidemiological, clinical, cytologic, colposcopic, virological, and histological data of patients who underwent colposcopy, assessing its reliability in clinical practice.
Methods: This prospective, single-center study was conducted over 24 months (September 2022 to September 2024) in the Gynecology and Obstetrics Department A at Charles Nicolle Hospital, involving 104 patients with an average age of 45.2 years. Results: Smear results showed 30.76% with ASC-US, 12.5% with ASC-H, 7.6% with HSIL, 30.7% with LSIL, and 2.8% with AGC, with 42 positive HPV tests. Colposcopy showed a positive predictive value of 24% and a negative predictive value of 86%. Conization, performed on 23 patients, revealed in situ carcinoma in five cases. A statistically significant correlation was observed between cytological severity on smear tests and histological abnormalities.
Discussion: Our findings confirm the continued relevance of colposcopy in cervical cancer prevention, especially given its high negative predictive value, despite moderate positive predictive accuracy. The significant association between cytological and histological severity reinforces the role of colposcopy in identifying high-risk patients. Integrating cytological, colposcopic, and virological data can enhance early detection, underscoring the need for a multidisciplinary approach to cervical cancer prevention.

VAGINA : AN USUAL METASTATIC SITE TO NOT DISMISS

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Introduction: Primary vaginal malignancies are rare and vaginal metastases constitute the majority of vaginal malignancies. Most of these metastases arise from the cervix, endometrium or ovary, although they can also metastasise from distant sites such as colon, rectum and gallbladder.
Methods: Methods We reviewed retrospectively 140 cases of vaginal cancer at Salah Azaiz institute between 1994 and 2024.
Results: We collected 3 cases of vaginal metastasis. Primary site was colorectal adenocarcinoma in two cases, and gall bladder cholangiocarcinoma. The mean age was 61.3 years (range from 50 to 70). The primary site was known in 2 patients, however metastasis was revealing in only one case of gallbladder cholangiocarcinoma. Vaginal metastasis was revealed by postmenopausal bleeding in all the cases. Clinical exam showed an enlarging firm not well defined and bleeding mass of Vagina. Gynecologic exam showed a rigid and irregular mass infiltrating vaginal wall. The rest of the exam was normal. Tumors' markers were negative. CT was performed in three cases, and showed a liver progression in one patient, no distant metastases in one patient, and gallbladder tumor in one case. The metastasis were confirmed by biopsy and histological exam. In patient with gallblader tumor, we performed a biopsy also of the primary site. The multidisciplinary meeting agreed to have chemotherapy. Unfortunately, All the patient passed away few months later.
Conclusion: The prognosis for vaginal metastasis is poor, as it is often associated with disseminated disease.

PAPILLARY CARCINOMA IN THE BREAST OF THE MALE : CASE SERIES

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Introduction: Breast cancer of male is a rare disease that accounts for less than 1.5% of all malignancies in men. Similar to women, invasive ductual carcinoma is the most common subtype while papillary carcinoma remains an extremely rare entity in men representing 5 to 7.5% of all breast male carcinomas. It is defined as a tumor that develops from the wall of a cyst in the breast and it can be in situ or invasive carcinoma.
Methods: We reviewed retrospectively 72 cases of papillary carcinoma at salah Azaiz institute between 2003

and 2024. Results Fourteen male patients had a papillary carcinoma. The mean age was 52.5 years old. Physical findings noted painless mass in all patients. One patient had a bilateral papillary carcinoma. Right breast was involved in 10 patients with predominantly retroareolar lesion. Mean tumor size was 35.5 mm. Palpable axillary lymph nodes was detected in 3 patients.Ultrasound examination revealed intracystic tumour in all patients. Diagnosis was made by core needle biopsy.one patient had inflammatory breast cancer, he had a neoadjuvant chemotherapy based on antracycline and taxane. Twelve patients underwent mastectomy with axillary lymph node dissection, one patient a mastectomy without lymph node dissection, and one had lympectomy under local anesthesia. Histological analysis showed intracystic papillary carcinoma in all patients. Immunohistochemical study marked the positivity of hormonal receptor in 9 cases, negative hormonal receptor in 6 cases with two patients and negativity of HER in all cases. Adjuvant radiotherapy was indicated for all patients and tamoxifen was administrated in patients with positive hormonal receptor. The mean follow up period was 57 months. One patient developed a local recurrence, Three patients developed distant metastasis.

Conclusion: Intracystic Papillary carcinoma has a good prognosis with benign presentation looking a cystic lesion.

PROGNOSTIC IMPACT OF LYMPHOCYTE INFILTRATION IN BREAST CANCER

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Introduction: Tumor-infiltrating lymphocytes “Tils” have emerged as a novel immunological marker linked to positive outcomes in triple-negative and HER2-positive breast cancers. Despite this, their assessment has not been integrated into standard clinical practice. Our study aimed to delineate the relationship between tils levels and clinicopathological characteristics in a cohort of Tunisian patients with breast cancer.

Methods: It was a retrospective review of 75 cases of breast cancer treated in our medical oncology department between January 2022 and September 2023.

Results: Median age was 48.6 years. Luminal, triple-negative and HER2-positive disease was present in 57.3%, 24% and 18.7% of cases, respectively. Only 9.7% of patients had metastatic disease at diagnosis. Most common site of metastasis was bone (57.1%). 36% of patients relapsed and 64% had complete remission after treatment. Overall survival was 50.4 months. Most tumours (86.6%) had less than 30% tils. Only six patients (13.2%) had more than 30% tils. Breast cancers with tils greater than 30% were correlated with estrogen and progesterone receptor negativity and in particular with the triple-negative profile, smaller tumour size, better overall survival and lower recurrence rates. Overall survival was also higher in this group of patients, but without statistical significance (61.2 vs 49.2 months). There was no correlation between the presence of tils and HER2 overexpression.

Conclusion: Tils in breast cancer offer valuable prognostic insights. They are at the forefront of research and have heightened interest in immunotherapy, particularly for triple-negative breast cancer.

HORMONE THERAPY IN BREAST CANCER :ANALYZING PATIENT ADHERENCE AND SIDE EFFECTS AT HABIB BOURGUIBA HOSPITAL UNIVERSITY SFAX, TUNISIA

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Introduction: Hormone therapy is a key treatment for hormone receptor-positive breast cancer, significantly reducing the risk of recurrence and improving survival. Tamoxifen and aromatase inhibitors (AIs) are commonly used agents.

Methods: An analytical study was conducted at the Medical Oncology Department of Habib Bourguiba Hospital in Sfax to assess patient adherence and the adverse effects of hormone therapy. A survey was used to collect data on patients’ age, disease stage, type and duration of hormone therapy, adherence, reasons for non-adherence, and specific side effects related to treatment.

Results: A total of 102 patients participated, with a median age of 52 years (range 26–80). Seventy-five percent had localized disease, 58% were postmenopausal, and 41% had undergone castration. Among the patients, 58% were on AIs, 37% on tamoxifen, and 7% received both treatments. The average duration of hormone therapy was 34 months (range 1–120). Regarding adherence, 76% of patients were compliant. Non-adherence was mainly attributed to treatment shortages (52%), forgetfulness (26%), and personal choice (22%). Among tamoxifen users, 56% experienced hot flashes, 25% had genital symptoms ,25% had abnormal endometrial thickening, and 25% complained of musculoskeletal pain. In AI-treated patients, 63% experienced hot flashes and musculoskeletal symptoms, 25% reported hair loss, 25% gained weight, and 11% had psychological symptoms, primarily nervousness.

Conclusion: Hormone therapy is effective, but its impact can be diminished by non-adherence and side effects. Addressing the causes of non-adherence and managing side effects could improve treatment outcomes and enhance patients' quality of life.

CLINICAL AND THERAPEUTIC CHARACTERISTICS OF MALE BREAST CANCER AT THE JENDOUBA CANCER CENTER: A DESCRIPTIVE STUDY (2020-2022)

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Introduction and Aim: Male breast cancer (MBC) is rare, representing less than 1% of breast cancer cases. This study evaluates the clinical, histological, and therapeutic characteristics of MBC patients treated at the Jendouba Cancer Center (2020–2022) and their outcomes.
Methods: This retrospective study included male patients diagnosed with breast cancer between 2020 and 2022. Data were collected on clinical features, tumor staging, histology, receptor status, and treatments.
Results: Seven patients (mean age 56.3 years) were analyzed. Tumor staging showed 57.1% with T1 tumors; T2, T3, and T4 stages each occurred in 14.3%. Lymph node involvement was absent in 57.1%, and metastasis in 85.7%. Most tumors (57.1%) were histologically grade 3 (SBR III). Receptor analysis revealed estrogen and progesterone positivity in 85.7% of cases, with HER2-negative status in 83.3%. Ki-67 was above 14% in all cases. Surgical management included Patey procedures in 85.7%. Chemotherapy was given to 57.1%, mainly with anthracycline-based regimens. Radiotherapy (40–66 Gy) was provided to all patients, with 57.1% receiving hypofractionated doses. Hormone therapy was used in 85.7%. After one year of follow-up, no locoregional recurrence was observed.
Conclusion: MBC patients treated at the Jendouba Cancer Center had favorable short-term outcomes, with no recurrence during the first year. Standard management included surgery, chemotherapy, radiotherapy, and hormone therapy. While these findings are promising, larger studies are required to validate the results and guide future management strategies.

DISTRESS SCREENING IN HOSPITALISED CANCER PATIENTS AT THE RADIOTHERAPY DEPARTEMENT OF SALAH AZAIEZ INSTITUTE

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Introduction: Integrating psychosocial oncology into standard cancer care is imperative for addressing the comprehensive needs of patients facing cancer. Aim: This study aims to assess the prevalence of distress among hospitalised cancer patients.
Methods: the QSC-R10, a valid screening instrument for self-assessment of psychosocial distress in cancer patients was delivered to hospitalised patients at the radiotherapy ward of Salah Azaiez Institute. A cutoff score of > 14 is suitable to determine the need for psychosocial support.
Results: Among a total of 30 patients, the mean age was 56.8 years, the majority were female (66.7%). Breast cancer accounted for 43.3%. The mean score of global distress was 21.6 , the maximum score was 38 and minimum score was 10. The highest mean value was related to the item «Afraid of recurrence» with a mean value of 2.7, and the lowest was related to the item « Partners' empathy» with a mean value of 1.7. According to the cutoff, 73.3% of the sample shows high levels of distress. However, around 43% of patients discuss emotional concerns only when invited to do so, and sixty percent of them find mental health issues are difficult to discuss ($p<0.001$). Higher scores of distress was correlated to a previous administration of chemotherapy ($p=0.003$). The items «Afraid of recurrence» and «Tense/Nervous» were correlated to a higher distress score ($p<0.001$).
Conclusion: Patients should be screened for psychosocial distress and offered adequate psychooncological support. In doing so, it aims to improve patient well-being and enhance overall treatment outcomes.

HYPOFRACTIONATED RADIOTHERAPY FOR BREAST CANCER AT SALAH AZAIEZ INSTITUTE DURING THE COVID-19 PANDEMIC : A 3-YEAR PRELIMINARY EVALUATION OF LATE TOXICITY

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Introduction : Hypofractionated radiotherapy for breast cancer has been shown to be a safe and effective strategy in large prospective trials. This study aims to evaluate late toxicity in breast cancer patients treated with hypofractionated radiotherapy.
Methods:This cohort study included 93 breast cancer patients treated with adjuvant hypofractionated radiotherapy (40 Gy in 15 fractions) at Salah Azaiez Institute during the COVID-19 pandemic (2020-2021). Late toxicity and limb symptoms were assessed after 3 years of follow-up.
Results: Mean age was 51 years. Conservative surgery was performed in 49% of patients. 53% had pT2 tumors, pN1 was observed in 31% of cases. 53% received a tumor bed boost (12.5 Gy/5 fractions). Nodal radiotherapy was performed in 73%. 58.3% had a breast volume ≥ 600 cc. Median follow-up was 36 months. 49.5% reported no breast pain, 45.2% of patients reported mild pain. 67.7% had no hyperpigmentation, 28% had mild hyperpigmentation. 71% had no fibrosis, 25.8% had mild fibrosis. 35.4% of breast-conserving surgery patients had mild asymmetry. 30.1% and 4.3% reported mild to moderate upper limb pain, respectively. 22.6% had stage I lymphedema, 3.2% had stage II. Analysis showed correlation between breast fibrosis, asymmetry, and breast pain with large breast volume ($p=0.004$, $p=0.003$, $p=0.002$, respectively). Boost administration was also correlated with,breast asymmetry and fibrosis ($p=0.004$).
Conclusion: This study, the first to evaluate late toxicity after hypofractionated radiotherapy for breast cancer, demonstrated acceptable tolerance of late cutaneous toxicity. Main risk factors for late cutaneous toxicity included large breast volume and boost administration. These findings support hypofractionation while emphasizing the importance of risk factor assessment for optimal outcomes.

ROLE OF CANCER ANTIGEN 15-3 IN BREAST CANCER: INITIAL AND FOLLOW-UP EVALUATION

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Introduction: Cancer Antigen 15-3, is a protein that is often elevated in the blood of patients with breast cancer “BC”. The aim of the study is to assess its value in the early detection of recurrence.
Methods: Retrospective study of 118 patients treated for early BC at the Jendouba Medical Oncology Department between 2020 and 2023.
Results: Median age was 48 years. invasive ductal carcinoma observed in 88%. Hormone receptor+ in 80% cases and 16% were Her2+. Surgery performed in 110 patients. All patients underwent chemotherapy. 28% received radiation therapy. Hormonal therapy administered to seventy patients,12% treated with Herceptin. 29 relapsed within an average period of 22 months and Metastatic recurrence occurred in 27 patients. CA 15-3 levels were determined in 64 patients. Fourteen had high levels. There was no correlation between CA 15-3 and classical prognostic factors, relapse and death from BC. 28 patients relapsed were detected by CA 15-3 testing. The positive predictive value of high CA 15-3 preceded clinical detection of relapse by 45 days to 10 months. Nineteen of the 28 patients (68%) had a high CA15-3 level at relapse. Among patients who did not relapse, 17% had a high CA15-3 level.
Conclusion: This study confirms the value of CA 15-3 as a tool for early diagnosis of metastatic recurrence. They also identify situations in which the sensitivity of CA 15-3 is insufficient, indicating the need for a dynamic interpretation of the marker, which is more sensitive and occurs earlier.