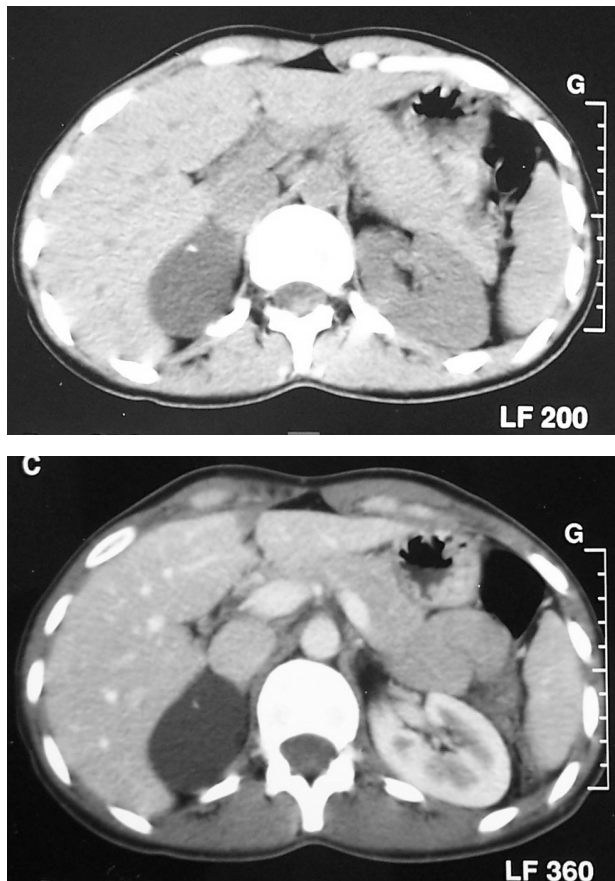


discharged from the hospital three days later with normal physical and laboratory findings.

**Figure 1 and 2:** Contrast-enhanced helical CT scan: a 5 x 4 cm in diameter, hypo dense, lobulated, and well-marginated and none is enhancing cystic mass of the right adrenal gland.

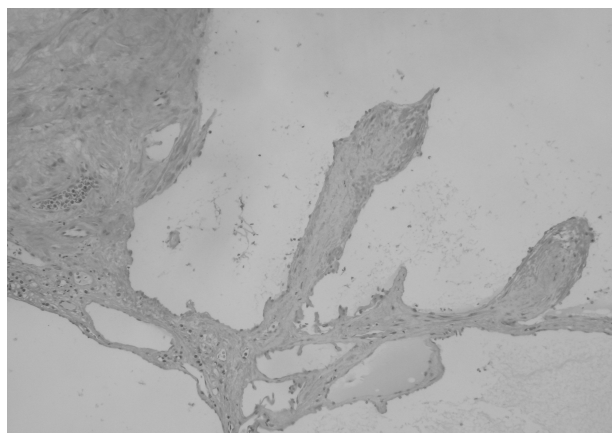


On pathologic examination, the adrenal gland contains a large cystic component. Cut section revealed a serous filled cystic cavity. The cystic spaces were filled with proteinous fluid. Histologic sections revealed multiple cystic spaces lined by flat endothelial lining. The surrounding adrenal tissue appeared normal. The cellular lining of cyst displayed no evidence of atypia (Figure 3). Immunohistochemically, these cells stained positively for CD31 and CD34. The cells were positive for smooth muscle actin, which circumscribed the cyst. Overall, the findings were consistent with benign cystic lymphangioma of adrenal gland. A follow-up abdominal ultrasound examination 17 months later did not reveal any evidence of recurrence. The patient's clinical symptoms disappeared.

### Conclusion

Adrenal lymphangiomas are very rare, benign lymphatic neoplasms. They are more and more found incidentally as cystic masses. They necessitate surgical removal to rule out other types of adrenal neoplasms. Histological examination is mandatory to confirm the diagnosis.

**Figure 3:** Histopathologic specimen: multiple cavernous lymphatic vessels lined by smooth endothelium adjacent to the normal-appearing adrenal gland. (H and E, x100)



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### Leiomyoma of the vulva

Leiomyoma is a relatively rare but most common benign solid tumor of the vulva. It represents only 0.03% of all patients with gynecologic neoplasms [1]. These tumors are considered to originate from smooth muscle within erectile tissue, blood vessel walls, the round ligament, the dartos muscle, or the erector pili muscle. Complex morphological features of these tumors of the vulva often resemble other soft tissue tumors of the vulva, leading to diagnostic difficulties. They tend to become pedunculated, especially if large and lymphadenomatous, and the pedicle may become so long that the growth dangles between the limbs [2]. In the literature, only a few cases have been reported [3, 4]. For this reason, we consider that this case is of interest and worthy of reporting.

### Case report

A39-year-old G2P2 female presented with a vulvar mass. Medical history revealed that she had 2 to 3 cm wide solid mass on her external genitalia for 4 years and during the last 6 months she developed enlargement of the lesion measuring about 15 cm

in diameter. The family and patient's past medical history was not significant. Pap smear was normal. Her general physical examination was unremarkable except for a non-tender solid and pediculated mass, 15 cm long and 13 cm wide, originating from the left labium majus (Fig.1).

**Figure 1 :** Pediculate vulvar leiomyoma

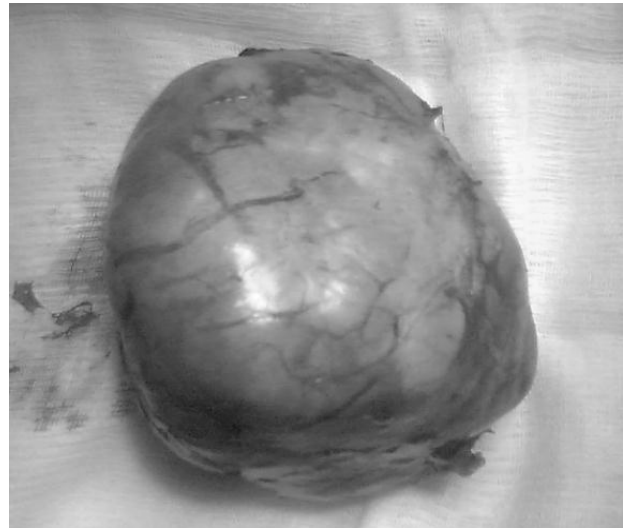


Pelvic examination, vaginal ultrasonography and laboratory analyses including tumor markers were normal. Under general anesthesia, a circular incision around the base of the vulvar pendulous mass was undertaken, and a mass of 480 g was successfully excised (Fig.2). In histologic examination the mass was a well-encapsulated solid tumor measuring 14?12.5?11.5 cm with a smooth, pink, glistening outer surface (Fig.3).

**Figure 2:** Post-operative appearance



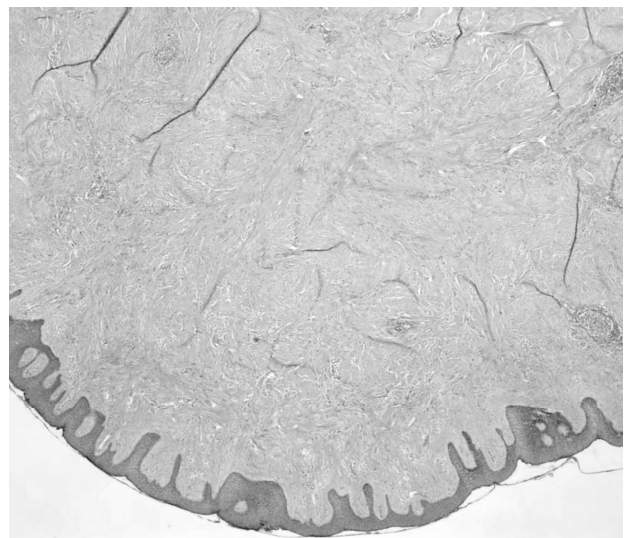
**Figure 3 :** Macroscopic aspect of the tumor



The cut surface was yellow-tan and soft with a whorled or slightly nodular pattern. Microscopically the tumor was composed of interlacing network bundles of fibroblastic cells with variable collagenisation showing fibroma associated to small irregular islands of round or oval cells. The nuclei showed minimal pleomorphism with low mitotic activity. Multiple microscopic foci of inflammatory cell aggregates were noted around blood vessels (Fig.4). Immunohistochemical studies revealed that tumor cells were strongly positive for smooth muscle actin and focally positive for vimentin and desmin. Stains for estrogen and progesterone receptors were focally and weakly positive. This profile is consistent with a tumor of smooth muscle origin.

The final diagnosis therefore, was leiomyoma of vulva.

**Figure 4 :** Microscopic aspect of the tumor



## Conclusion

Leiomyoma of the vulva is rare. The mass presented in this report was the largest benign leiomyoma in the literature. It occurs in women of reproductive age and sometimes clinically misdiagnosed as Bartholin cyst or abscess. Careful histological evaluation with proper immunohistochemical studies helps to establish an accurate diagnosis.

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## Patent foramen ovale as a cause of a massif paradoxical Oxygen embolism after hydrogen peroxide irrigation

Paradoxical air embolism is a particular entity, which is an uncommon variant of air arterial embolism, occurs when venous emboli pass directly into the systemic circulation through a venous to arterial circulation shunt, bypassing the filtering function of the lungs [1]. The most common anatomical cause is patent foramen ovale (PFO).

We herein report the first case of paradoxical air embolism by PFO, arisen after use of the hydrogen peroxide.

## Case Report

A 26-year-old woman was admitted because of two left non complicated pulmonary hydatid cyst. After induction of anesthesia with fentanyl 200 gamma, propofol 200 mg and cisatracurium 12 mg, the patient was intubated selectively with a n°37 right probe without incident. Anesthesia maintenance was established by continuous infusion of propofol, of remifentanyl and reinjection of cisatracurium.

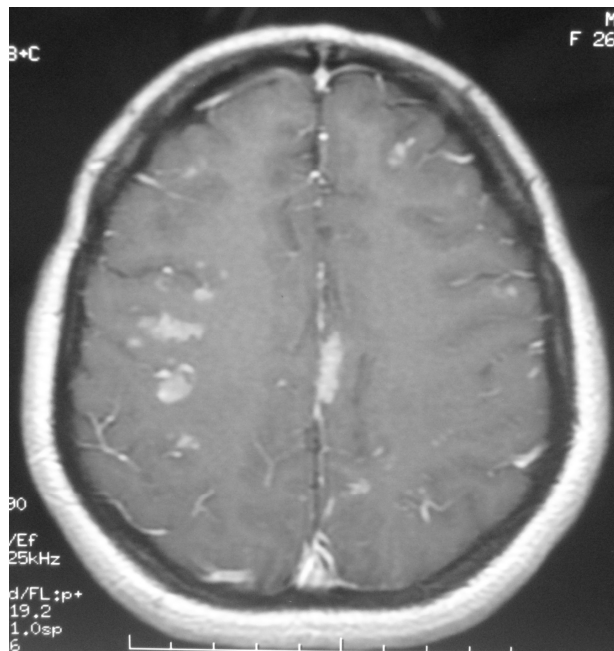
A short lateral thoracotomy was undergoing. After that, the operative field was protected by impregnated compress with 50ml of hydrogen peroxide solution as scolicalid. Suddenly occurred a decrease in PETCO<sub>2</sub> from 36 to 19 mmHg, a heart arrhythmia and then a cardiovascular collapse (BP = 60/30 mmHg, heart rate = 160 b / min) without decrease in SpO<sub>2</sub>.

The symptomatic treatment initiated immediately restored the

hemodynamic within a few minutes. Mental confusion, left hemiplegia with brachial predominance flaccid facial palsy and Babinski signs were gradually installed in the few hours following the intervention.

Her ECG disclosed regular sinus rhythm. Routine biochemical analyses yielded normal results. The patient showed no clinical evidence of venous thrombembolism. The initial cerebral computed tomography without contrast performed 12 hours following the intervention was normal. Trans thoracic echocardiography showed a patent foramen ovale without others abnormalities. In front of the strong suspicion of paradoxical arterial air embolism, a 90 minutes session of hyperbaric oxygenation was performed 24 hours following the intervention. An MRI cerebral done in the third postoperative day revealed cerebral artery infarct in a right fronto-temporal territory and corpus callosum (Figure 1).

**Figure 1:** MRI revealed cerebral artery infarct



The evolution is marked by the appearance of ventilator associated pneumonia with a favorable outcome. A tracheotomy was performed on the tenth day after surgery.

The neurological evolution was marked by gradual regression of sensory and motor deficit. The patient was discharged from ICU 20 days after this episode. The examination found no neurologic abnormality.

## Conclusion

PFO is an anomaly due to the lack of fusion of the septum secundum and septum primum. In general, because left atrial (LA) pressure normally exceeds right atrial (RA) pressure, the increased pressure in the LA closes the flap-like opening in the PFO. However, if right atrial pressure is increased, and exceeds