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RESEARCH ARTICLE

OVARIAN SERTOLI-LEYDIG TUMOR: CLINICAL AND ANATOMO-PATHOLOGICAL ASPECTS, ABOUT AN OBSERVATION

I. Traoré, H Taghzouti, M. B. Idrissi, K. Saoud, N. Mamouni, S. Errarhay, C. Bouchikhi and A. Banani
Service de Gynécologie Obstétrique I CHU Hassan II, Faculté de Médecine, de Pharmacie et de Médecine Dentaire, Université Sidi Mohammed Ben Abdellah, FES.

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Abstract

Sertoli Leidig tumors are rare tumors, representing less than 0.5% of ovarian tumors. It is the moderately and poorly differentiated forms which are the most common. We report a case in a 25-year-old female patient with right ovarian localization. The patient underwent right adnexectomy surgery which removed the tumor. The management of these tumors is not good, it is a tumor with a relatively good prognosis due to early diagnosis with a lesion still limited to the ovary.

Introduction:-

Rare malignant ovarian tumors represent less than 10% of ovarian tumors in adults [1]. The Sertoli Leydig tumor represents only 1% of these tumors and is seen mainly in young women with a median age of 20 years even before the first pregnancy. The management of these tumors requires surgery in most cases; it is essential to be conservative and respect the genital tract as much as possible to preserve ovarian hormonal function and fertility.

Patient and Observation:-

Patient information

This is Ms. S O, a patient aged 25, married, mother of one child.

Background

Familial:

Endometrial tumor in a sister under treatment

Medical:

Nothing reported

Surgical:

Operated on 10 years ago for undocumented ovarian cyst. Had a cesarean section 1 year ago.

Gynecological:

Menarche at the age of 14, regular cycle. G1P1

Patient admitted following progressive increase in abdominal volume over 3 months.

Corresponding Author:- I. Traoré
Address:- Service de Gynécologie Obstétrique I CHU Hassan II, Faculté de Médecine, de Pharmacie et de Médecine Dentaire, Université Sidi Mohammed Ben Abdellah, FES.

Clinical results:
Conscious patient, hemodynamically and respiratory stable, afebrile.

Gynecological examination:
Speculum:
macroscopically normal cervix, no external bleeding, no pathological leukorrhea.

Vaginal examination:
Cervix of normal consistency, uterus difficult to assess, slight lateral uterine sensitivity bilaterally.

Abdominal examination: abdomen enlarged, palpation of a slightly hard mass, appearance of pain on palpation.

Therapeutic intervention and follow-up: we carried out:
Thoraco abdomino pelvic scanner
- Large abdominopelvic mass, multi-septate solido-cystic mass, occupying the flank and the right iliac fossa, measuring 113 x 151 x 193 mm, associated with minimal peritoneal effusion
- A small collection next to the cesarean scar, measuring 36 x 27 mm

Pelvic suprapubic and endovaginal echo:
- Large multiloculated cystic abdominopelvic mass, of right ovarian origin, containing hemorrhagic changes, requiring comparison with MRI data to eliminate possible small tissue buds.
- Intraperitoneal fluid effusion of low abundance at the pelvic level.
- C-/C+ chest CT without suspicious abnormality detected.

CA 125: 12 IU/ML
CA19-9: 40.15 IU/ML
ACE: 1.6
The patient underwent laparotomy with the following operative report:
- under AG in supine position
- painting with betadine and setting up sterile fields
- recovery of the old subumbilical scar enlarged above the umbilical
- opening plan by plan
- exploration: (figures 1; 2; 3; 4)
    - normal sized uterus
    - presence of a right ovarian mass of 15cm renitent without anarchic vascularization or exocyst bud, presenting multiple loose adhesions with the digestive tract carefully released
    - left tube partially seen, left ovary not seen buried in digestive adhesions
    - unremarkable appendix
    - the rest of the exploration is without particularities
- ovary taken entirely in the mass with impossibility of doing a cystectomy: decision to do an adnexectomy
- ligation of the right lumbosacral ovary after visualization of the right ureter
- one-piece section ligation of the tube and the right ovarian uterus
- right adnexectomy performed
- attempt to release intestinal adhesions for exploration of the contralateral ovary difficult: not done given the significant risk of intestinal injury
- performing biopsies of the right GPC (GPC inaccessible by digestive adhesions)
- performing a biopsy of the omentum
- abundant washing with SS9%
- hemostasis obtained
- FPPP after correct count of fields and compresses

Documents addressed to the anapath:
A. right adnexectomy
B. Right GPC biopsies
C. biopsy of the omentum
D. peritoneal cytology

Anapath post surgery
A. Undifferentiated, largely necrotic tumor proliferation whose histological subtype requires an immunohistochemical study.
B. Substantially normal fatty fibrous tissue.
C. Substantially normal fatty tissue.
D. Hemorrhagic fluid.

Immunohistochemical complement
- Sertoli leidig tumor with intermediate differentiation.

Monitoring and evolution
After surgery, the patient's file was discussed in a multidisciplinary consultation meeting with a decision:
Uterine curettage returning without anomaly.

Clinical and biological examination (inhibin B, estradiol, progesterone, Ca 125, testosterone) every 4 months for 1 year, every 6 for 2 years then once a year.

Endovaginal ultrasound every 6 months for 2 years then one ultrasound per year.

Figures

Figure 1:-

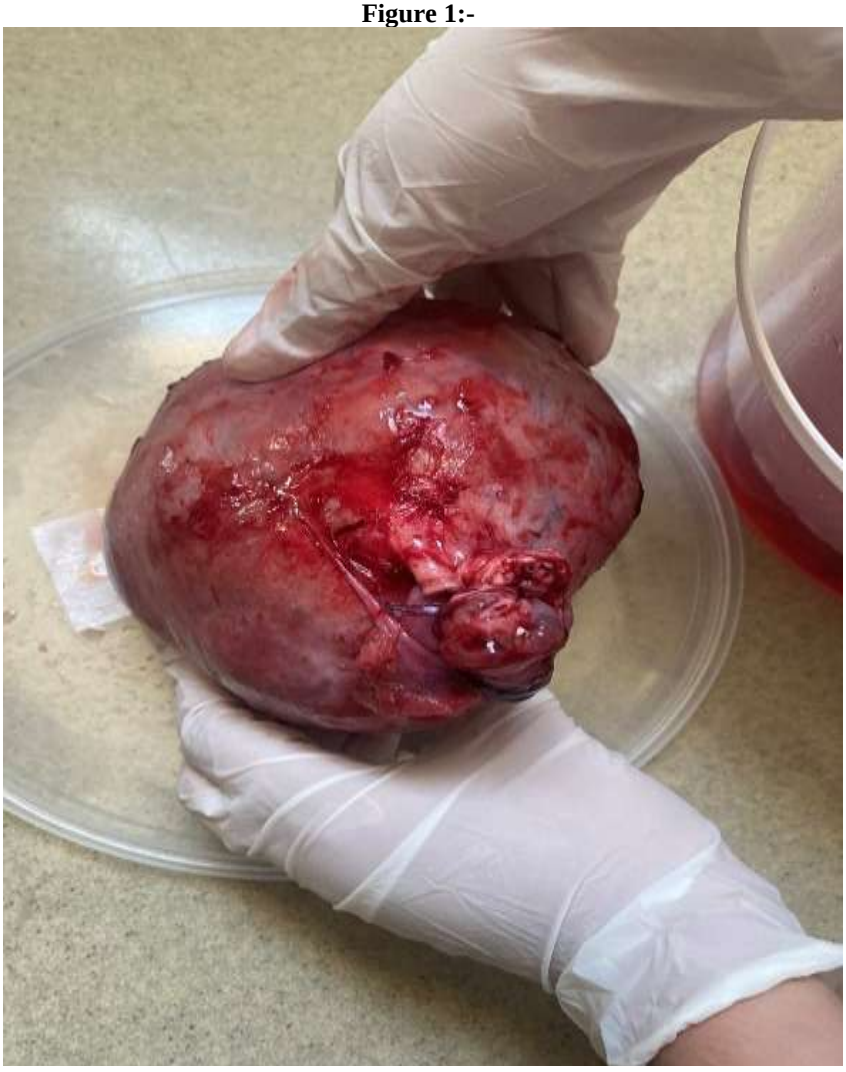


Figure 2:-

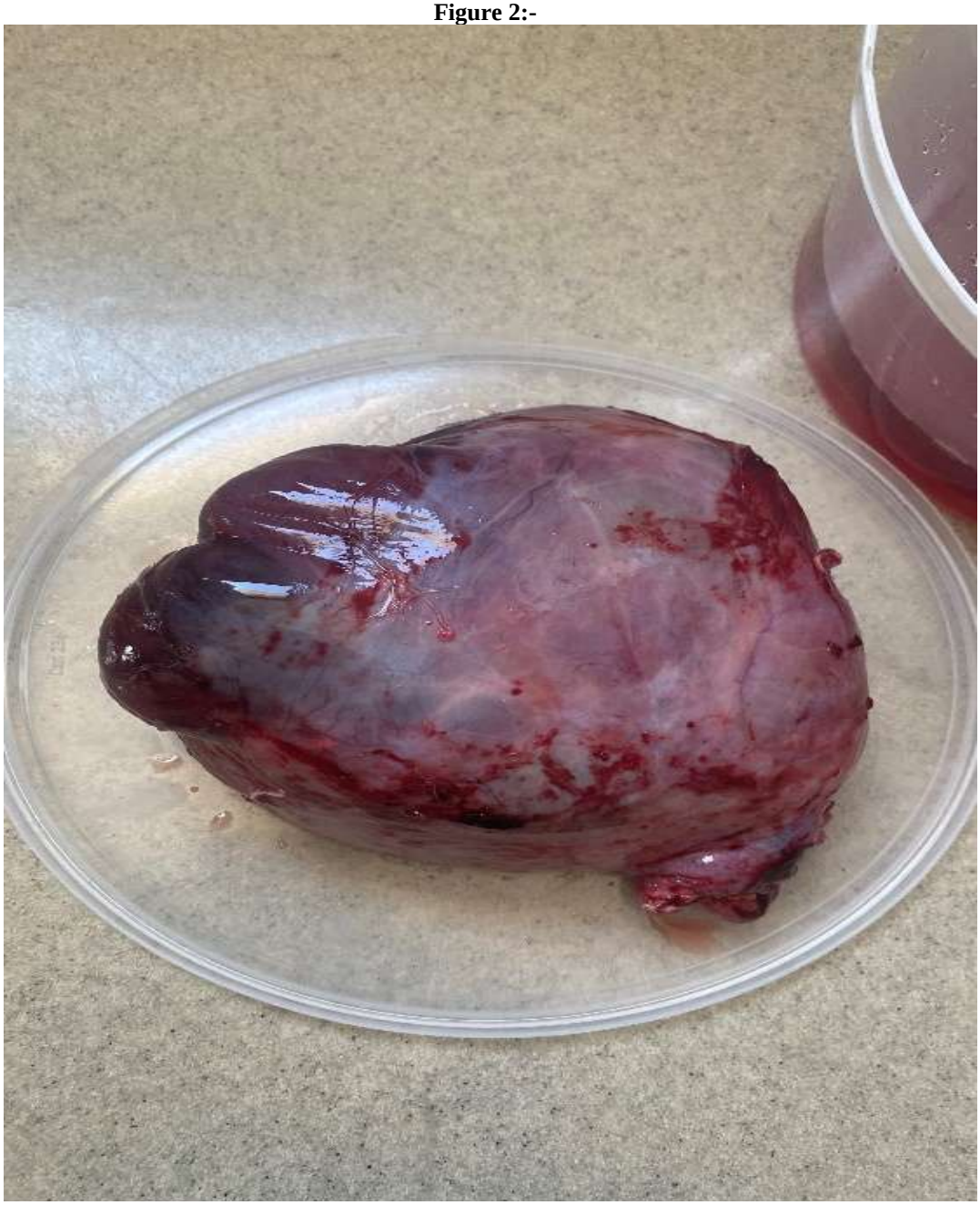


Figure 3:-

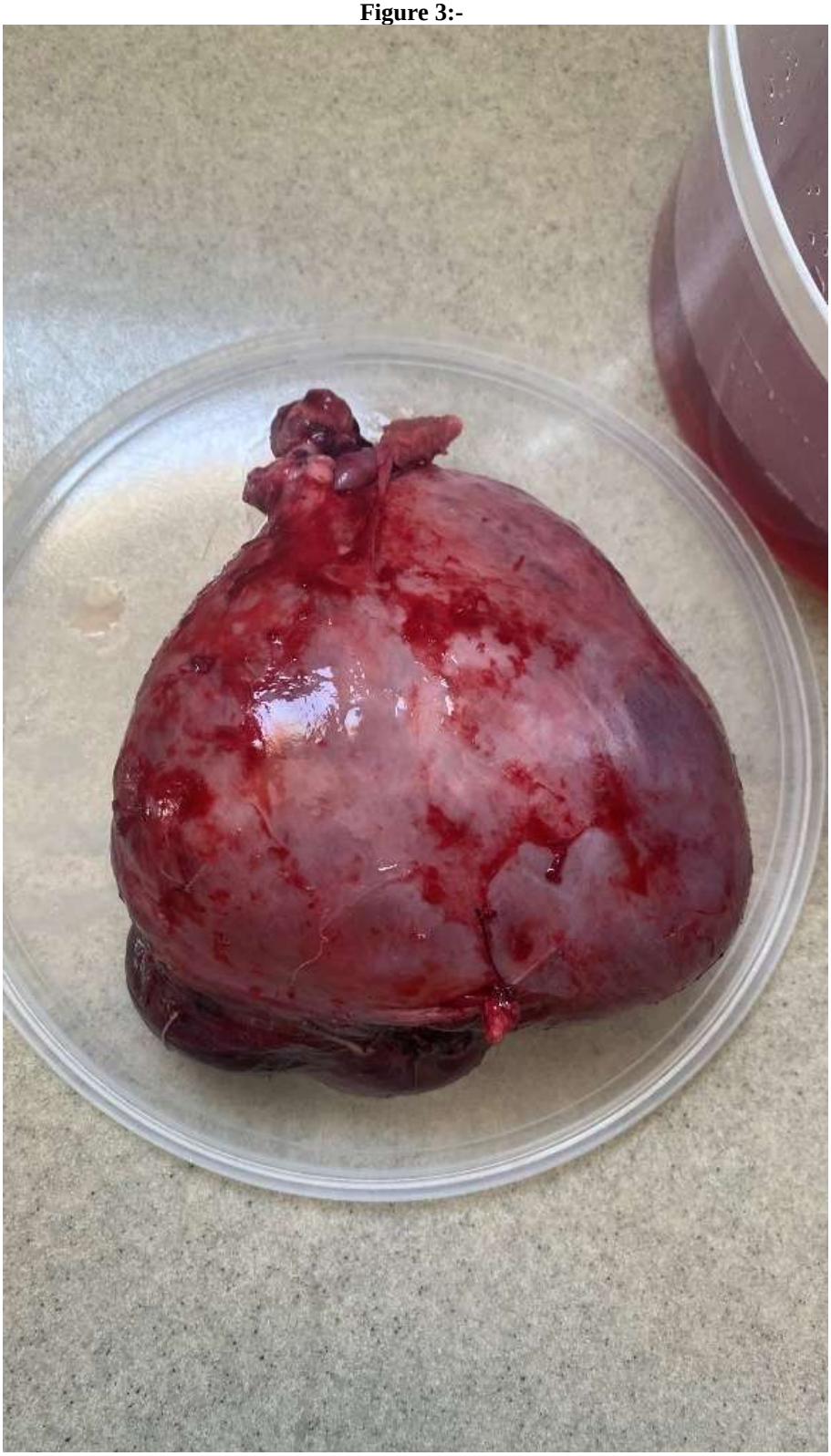
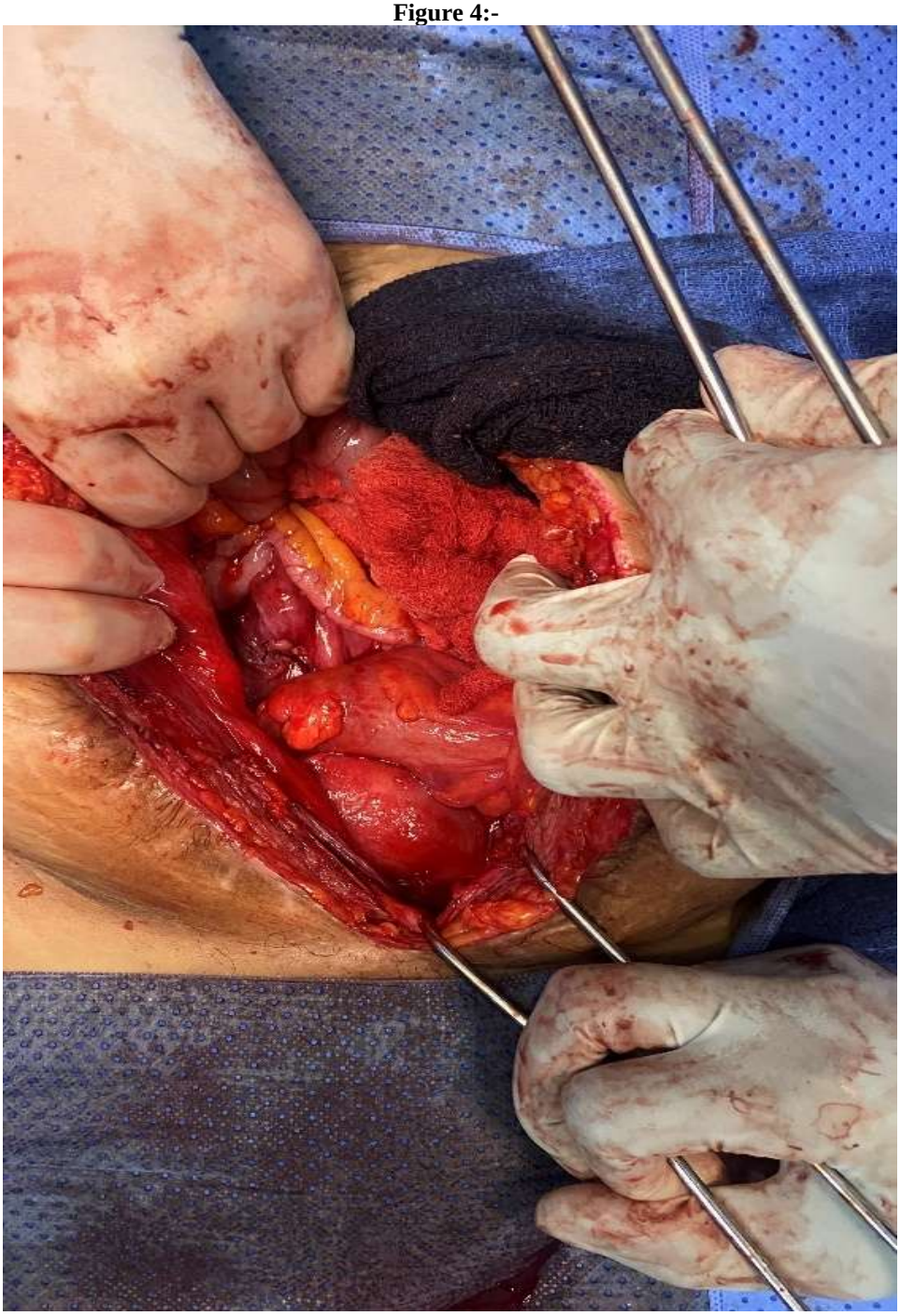


Figure 4:-



Discussion:-

Sertoli-Leydig cell tumors contain variable proportions of Sertoli and Leydig elements. The moderately and poorly differentiated forms are the most common [2]. They can be seen between the ages of 2 and 75, but the majority of them are expressed during the second and third decade with an average age at diagnosis of 25 years [3]. The level of differentiation seems linked to age [4], the least differentiated forms mainly concern young subjects and are more likely to be associated with symptoms of virilization. In our context the patient was 25 years old, this age corresponds to the time of diagnosis reported by the majority of cases described in the literature. The patient was well regulated, without signs of virilization with a pregnancy carried to term. This can be explained by the fact that

our patient has a history of surgery for an ovarian cyst for which we were unable to obtain the details of the procedure.

These tumors are almost exclusively unilateral and limited to the ovary, approximately 10% of cases present with ovarian rupture and 4% have ascites. Only 2 to 3% of cases are metastatic at diagnosis, this mainly concerns poorly differentiated tumors. Their size varies greatly, reaching 35 cm, with the average size being 12 to 14 cm [5].

Clinically, there are signs of virilization in 1/3 of cases while some patients may present signs of hyperestrogenism [6]. In our patient there were no signs of virilization, however signs of hyperestrogenism were present.

A majority of Sertoli-Leydig cell tumors are benign, but approximately 20% recur or give metastases which can ultimately have a fatal outcome. Unlike granulosa tumors, recurrences occur early in malignant Sertoli-Leydig tumors (2 to 3 years) [7]. Our patient has a history of surgery for an ovarian cyst for which information on the anapathological result and the operative report was not available, however the patient did not present any pain.

Conclusion:-

The clinical aspects of Sertoli-Leydig cell tumors are varied and not very specific, which can influence their diagnosis. However, the anatomopathological and immunohistochemical study have a very great diagnostic interest.

Conflict of interest

The authors declare no conflict of interest.

Author contributions

All authors read and approved the final version of the manuscript.

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