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Case Study

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OVARIAN SERTOLI-LEYDIG CELL TUMOR: A CASE REPORT

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ABSTRACT

We present the case of a 20-year-old woman, without any particular pathological history, who consulted for a secondary amenorrhea of 6 months and in whom the clinical examination found an abdominal-pelvic mass, The biological workup, in particular hormonal, and the chest X-ray were without abnormalities. Macroscopically, the tumor had a cystic component with necrotic fibrosis. Anatomopathological examination confirmed the diagnosis of Sertoli-Leydig tumor. The diagnosis of Sertoli-Leydig tumor was made. It is a rare tumor, representing less than 0.5% of all ovarian tumors. Well-differentiated forms are uncommon. In one third of cases, they are clinically expressed by hypervirilization, and imaging will be used to orient the diagnosis and especially to make the extension assessment. There are several histological subforms. The management is not codified, each center having its own practices. This is a tumour with a relatively good prognosis due to its early diagnosis with a lesion still limited to the ovary.

KEYWORDS: Sertoli-leydig tumor; Ovary; virilization.

INTRODUCTION

SLI are rare tumors, representing less than 0.5% of ovarian tumors. They can be seen between the ages of 2 and 75 years, but the majority of them occur in the second and third decades with an average age at diagnosis of 25 years. Its histological diagnosis is difficult and its evolution unpredictable. Through this observation and a review of the literature, we will expose the difficulties of management of this tumor.

MATERIALS AND METHODS

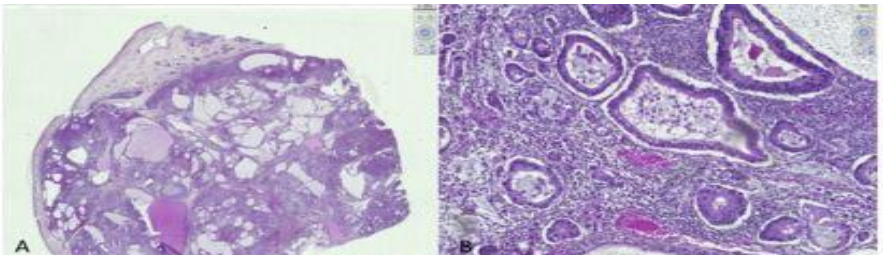
We present the case of a 20 year old woman, without any particular pathological history, who consulted for a secondary amenorrhea of 6 months without pain or other accompanying signs, Clinical examination revealed an abdominopelvic mass extending 4 fingerbreadths beyond the umbilicus, soft, painless and mobile, with a groove separating the uterus.

Ultrasound examination showed an enlarged right ovary, vascularized on doopler, with a homogeneous anechoic latero-uterine mass of 8 cm long axis, an unremarkable left ovary with a peritoneal effusion layer, a thin and bechogenic endometrium with a thin vacuity layer.

-The CT scan showed moderate hemoperitoneum.

The biological workup, especially hormonal, and the chest X-ray were without abnormalities.

-At the time of the operation, we found an enormous mass with a cystic component and necrotic and friable fibrosis on the right ovary, adjacent to an epiploic region, with a uterus of normal size and configuration, the left adnexa without any particularities as well as the rest of the pelvis. The surgical procedure consisted of a right oophorectomy and resection of the omentum in the necrotic area. Anatomopathological examination confirmed the diagnosis of Sertoli-Leydig tumor (Figure 1 and 2).



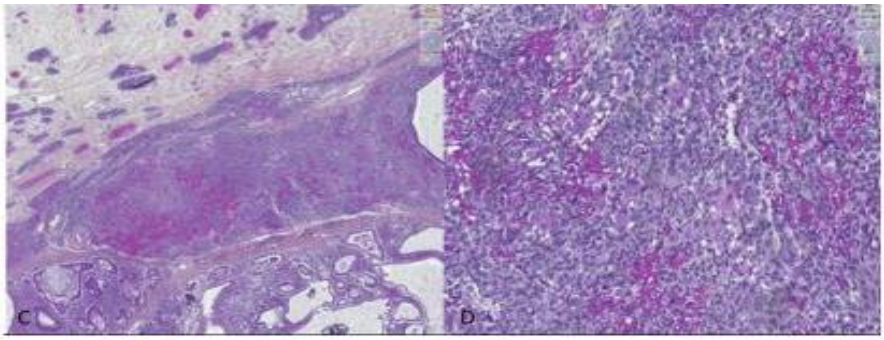


Figure 1: Cystic area (standard staining HPS). A. Overview of the lesion (magnification × 0,5). B. Glandular heterologous elements (magnification × 10). C. Leydig cells seen next to the heterologous elements (magnification × 2,5). D. Leydig cells contingent (magnification × 16).

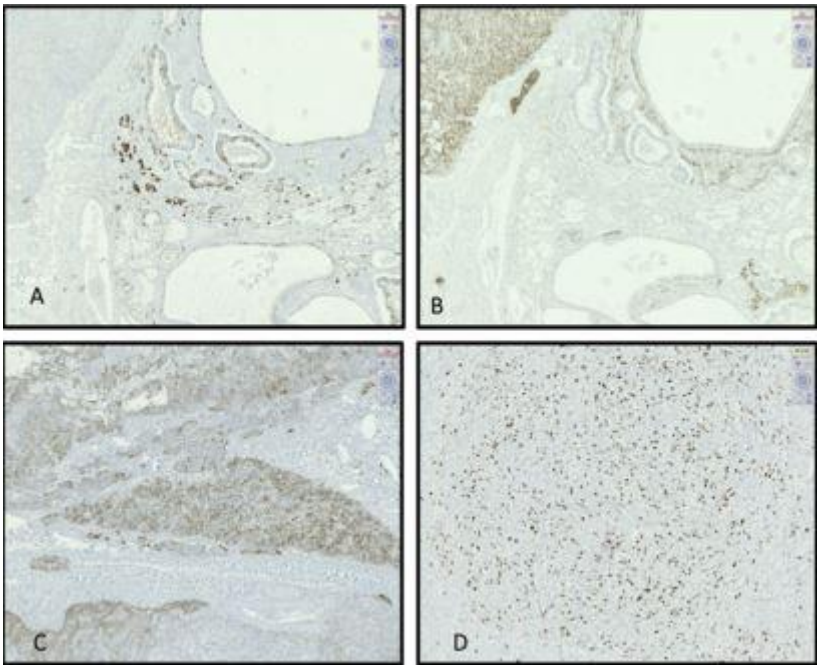


Figure 2: Immunohistochemistry. A. CK7 and CK20 are similar, there is an heterogenous positivity of the glands in the heterologous elements (magnification × 5). B. Inhibin showing positive staining of the Leydig cells next to the heterologous elements (magnification × 5). C. Inhibin showing positive staining of Leydig cells in a solid area (magnification × 5). D. Ki 67 in a solid area (magnification × 8)

The patient was then referred to the National Institute of Oncology for further treatment with BEP (Bleomycin-Etoposide-Cyclophosphamide).

RESULTS AND DISCUSSION

SLI are rare tumors, representing less than 0.5% of ovarian tumors. It is the moderately and poorly differentiated forms that are the most frequent.[1] They can be seen between the ages of 2 and 75 years, but the majority of them occur in the second and third decades of life with an average age at diagnosis of 25 years. These tumors are almost exclusively unilateral and limited to the ovary, about 10% of cases have ovarian rupture and 4% have ascites.[1][2] Clinically, there are signs of virilization in 1/3 of cases, while some patients may show signs of hyperestrogenism.[3] Biologically, this hypervirilization is reflected by an increase in testosteronemia in nearly 80% of cases. This test is essential in case of virilization in order to eliminate an adrenal anomaly, but also for follow-up (dehydroepiandrosterone, estradiol, 17 hydroxy-progesterone and cortisol). The eventual elevation of these hormones and their normalization after surgical excision constitutes a very good monitoring parameter. Histological examination allows the grade of the tumor to be defined. Differentiation is assessed according to the degree of tubular differentiation of the Sertoli cell component (which decreases with increasing grade) and the abundance of the primitive gonadal stroma (which increases with increasing grade).Macroscopically, these tumors are almost always unilateral.[4] Ultrasound with Doppler may help to evoke the diagnosis, Sertoli-Leydig tumors appear as a solid tumor, more or less multicystic, richly vascularized.[5]

The treatment is first of all surgical, based on a simple adnexectomy, as the lesions are most often unilateral, or

even a conservative surgical treatment is possible in women of childbearing age, or a bilateral adnexectomy with hysterectomy is indicated if the tumor is poorly differentiated, or at a higher FIGO (International Federation of Gynecology and Obstetrics) stage in older women. The extemporaneous examination leads to the diagnosis of a non-epithelial tumour, then to that of a sex cord tumour.[5][6]

A peritoneal staging must be associated: complete examination of the abdominopelvic cavity, sampling of abnormal areas, systematic peritoneal biopsies. The indication for adjuvant treatment is BEP chemotherapy at a rate of 4 cycles. Recurrences are early in the first year after surgery. The reported prognostic factors are: histological grade, tumor rupture and the presence of heterologous mesenchymal elements.[7]

The follow-up after treatment is clinical, biological and radiological. The observatory of rare tumors recommends monitoring every four months for the first two years, clinical and biological follow-up every six months and radiological follow-up every year from the third to the fifth year and then annually.

CONCLUSION

Leydig and Sertoli cell tumor of the ovary is a rare entity. Its occurrence in young nulliparous or pauperic women and its unpredictable evolution pose problems in the radical management of this tumor.

REFERENCES

1. Roth LM, Anderson MC, Govan ADT, Langley FA, et al. GowingNFC: Sertoli-leydig cell tumors: a clinicopathologic study of 34 cases. Cancer, 1981; 48: 187-97.
2. Young RH, Scully RE. Ovarian Sertoli-Leydig cell tumors. A clinicopathological analysis of 207 cases. Am J Surg Pathol, 1985; 9: 543-69.
3. Prunty FT. Hirsutism: virilism and apparent virilism and theirgonadal relationship. II. J Endocrinol, 1967; 38: 203-27.
4. Meldrum DR, Abraham GE. Peripheral and ovarian venousconcentrations of various steroid hormones in virilizing ovarian tumors. Obstet Gynecol, 1979; 53: 36-43.
5. Sharma S, Valiathan M, Kumar S, Kapoor S. OvarianSertoli-Leydig cell tumour with heterologous elementsmasquerading as mucinous tumour on frozen section: acase report. J Clin Diagn Res: JCDR, 2015; 9: ED01—3, http://dx.doi.org/10.7860/JCDR/2015/12311.6145.
6. Chen L, Tunnell CD, Petris GD. Sertoli-Leydig cell tumor with heterologous element: a case report and a review of the literature. Int J Clin Exp Pathol, 2014; 7: 1176-81.
7. Rani AB, Yong KL, Yin NC, Kwai LY. Sertoli-Leydig cell tumor of the ovary: analysis of a single institution database. J Obstet Gynaecol Res, 2013; 39: 305-10.