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Case Report

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A GIANT FIBROTHECOMA OF THE OVARY SIMULATING A MACROPOLYCYSTIC OVARY: ABOUT A CASE

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SUMMARY

Fibrothecoma of the ovary is a benign tumor, characterized by proliferation of thecal cells and fibrous cells. The association of clinical symptoms and imaging generally guides the diagnosis. The objective of this work is to highlight the diagnostic particularities, in particular radiological and macroscopic, while reporting the case of a 53-year-old patient, postmenopausal, with an ovarian mass evoking on imaging a macropolycystic ovary. We proceeded to a surgical procedure, and the histological study directs towards the fibrothecal origin of the ovarian mass.

MOTS-CLÉS: Fibrothecoma, ovary, macropolycystic.

INTRODUCTION

Fibrothecoma is a benign and rare tumor (3-4% of ovarian tumors[1], characterized by a proliferation of fibrous and thecal cells[2], it belongs to the group of ovarian stromal tumors according to the 2020 classification of the World Health Organization, and generally occurs in post-menopausal women. The objective of this work is to highlight the diagnostic particularities of this tumoral entity which can simulate a macropolycystic ovary.

PATIENT AND OBSERVATION

We report the case of a 53-year-old woman, single, nulligest, with hearing loss for 30 years, menopausal for 3 years, consulting for sciatalgia. The abdomino-pelvic examination did not objectivize a mass, the gynecological examination wasn't done (the patient was not consenting). The suprapubic pelvic ultrasound showed an enlarged right ovary with polycyclic contours, the seat of multiple non-vascularized heterogeneous fluid and tissue double component cysts of 15/10 cm (figure 1). Pelvic magnetic resonance imaging shows right latero-uterine pelvic masses (78X52 mm); supra and retro uterine, mixed with a homogeneous tissue center with simple peripheral macrocysts whose appearance evokes polymacrocystic ovaries. CA 125 and C-reactive protein are normal.

The intraoperative exploration reveals a half cystic right ovary containing a yellowish liquid, half solid of 23X16X7 cm (figure 2), the left ovary of normal pace and size, we carried out a peritoneal cytology then the bilateral adnexectomy.

The anatomopathological study of the right ovary, finds at the level of the ovarian mass a tumoral proliferation of thecal appearance with fusiform cells without atypia with a pseudocystic edematous reorganization and in places in total cystic transformation realizing an aspect of serous pseudo cyst or a partially luteinized ovarian fibrothecoma with edematous and pseudocystic changes (figure 3). The fallopian tubes show non-specific changes evoking chronic salpingitis. The left ovary shows cortical stromal hyperplasia. Peritoneal cytology shows irritative mesothelial hyperplasia cells.

DISCUSSION

Fibrothecoma is a usually benign and rare tumor (3-4% of ovarian tumors)[1], it develops at the expense of the ovarian stroma and belongs to the group of stromal tumors according to the 2020 classification of the World Health Organization. It's consisting of fibrous and thecal cells.[2] It generally occurs in women in the postmenopausal period, rarely in young women[3], a few cases of testicular fibrothecoma have been described in men.[4]

Clinically, fibrothecoma can manifest as pelvic pain or metrorrhagia. Metrorrhagia is the result of endometrial hyperplasia secondary to the endocrine syndrome when the tumor is secreting.[1] This endocrine syndrome can rarely result in signs of hyperandrogenism linked to hypertestosteronemia.[5] luteinizing hormone, estradiol and human chorionic gonadotropin were within the norms, this is explained by the effect of inhibin A and inhibin B secreted by fibrothecoma.[6]

There are associations or rare clinical forms, but which must be cited; Demons Meigs syndrome which associates ovarian fibroids, ascites and hydrothorax. Gorlin-Goltz syndrome or basal cell nevomatosis which associates nevibasocellular or punctate keratomas, calcifications of the falx cerebri, maxillary cysts and bilateral ovarian fibroids.[1] Gardner and Richard syndrome associates rectocolic polyposis, multiple sebaceous cysts, skull osteomas, desmoid tumors and ovarian fibrosarcomas.

Peutz-Jeghers syndrome is the association of rectal and gastrointestinal polyposis. These three syndromes are of autosomal dominant transmission[1], the multiple and recurrent form without genetic syndrome[8], the malignant fibrothecoma mentioned by Su-Kon Kim et al[9], and the secreting forms already described.

Ultrasound can typically show an echogenic adnexal mass with a posterior cone of shadow[1], but the tumor can be hypoechoic or mixed, with or without a posterior cone of shadow.[7] Atypically in our patient, the right ovary had heterogeneous polycyclic contours, with multiple cysts with a dual fluid and tissue component simulating the appearance of a macropolylystic ovary.

Ovarian fibrothecoma appears on MRI as an ovarian tumor that is generally hypointense and homogeneous on T1. In T2, it is in homogeneous or heterogeneous hyposignal with a late enhancement which is less than the enhancement of the myometrium.[10]

Microscopically, fibrothecoma consists of intermingled bundles or anastomosed trabeculae of ovoid, pale-nucleated thecal cells containing lipid droplets and spindle-shaped fibroblast elements. Granulosa cells, separated by collagen bundles, were also observed. For Prat and Scully, the tumor is benign if there are less than 3 mitosis per 10 HPF, and malignant fibrothecomas are supposed to show four or more mitotic figures per 10 HPF.[9]

The management of fibrothecomas is surgical by laparotomy or laparoscopy[1], depending on the size and location of the tumor, the age of the patient and her desire for fertility.[9]

Lumpectomy is the reference treatment in the event of a desire for fertility, a radical treatment such as unilateral or bilateral adnexectomy in a patient in perimenopause or menopause with or without hysterectomy.[1,9]

Figures

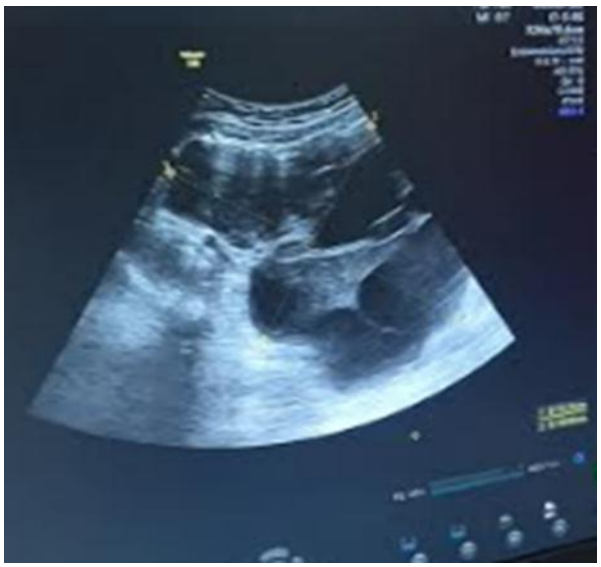

Figure 1: suprapubic ultrasound showing the ovarian mass.

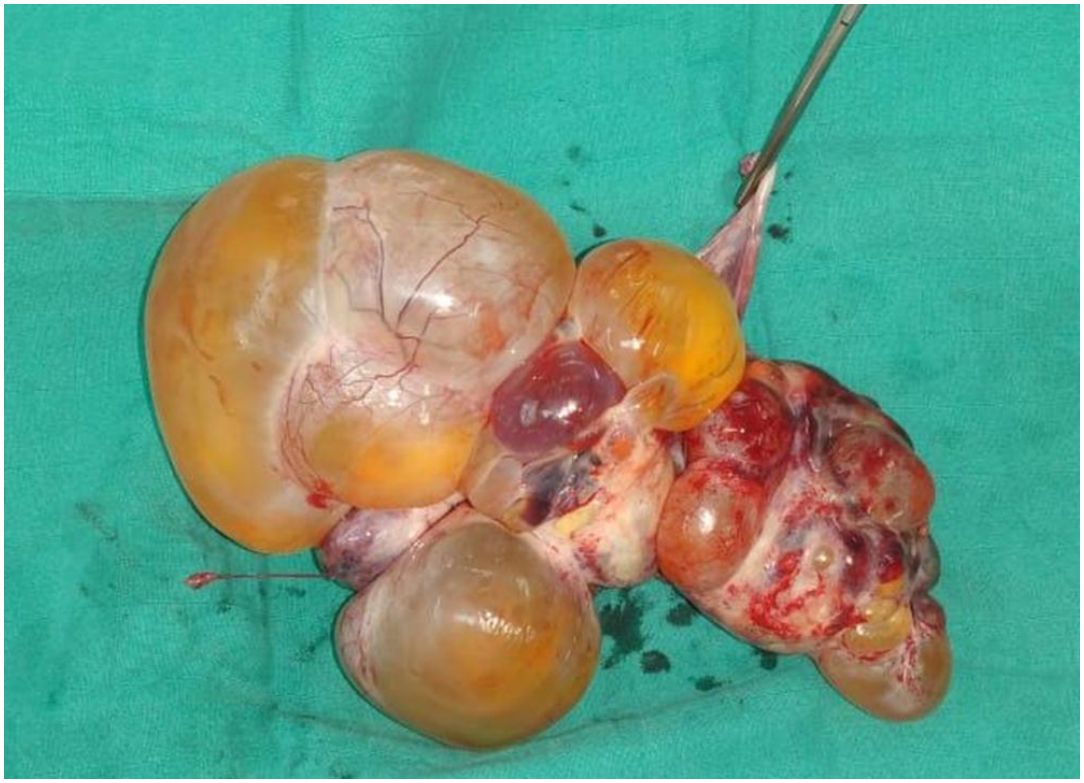

Figure 2: surgical specimen of the right adnexa.

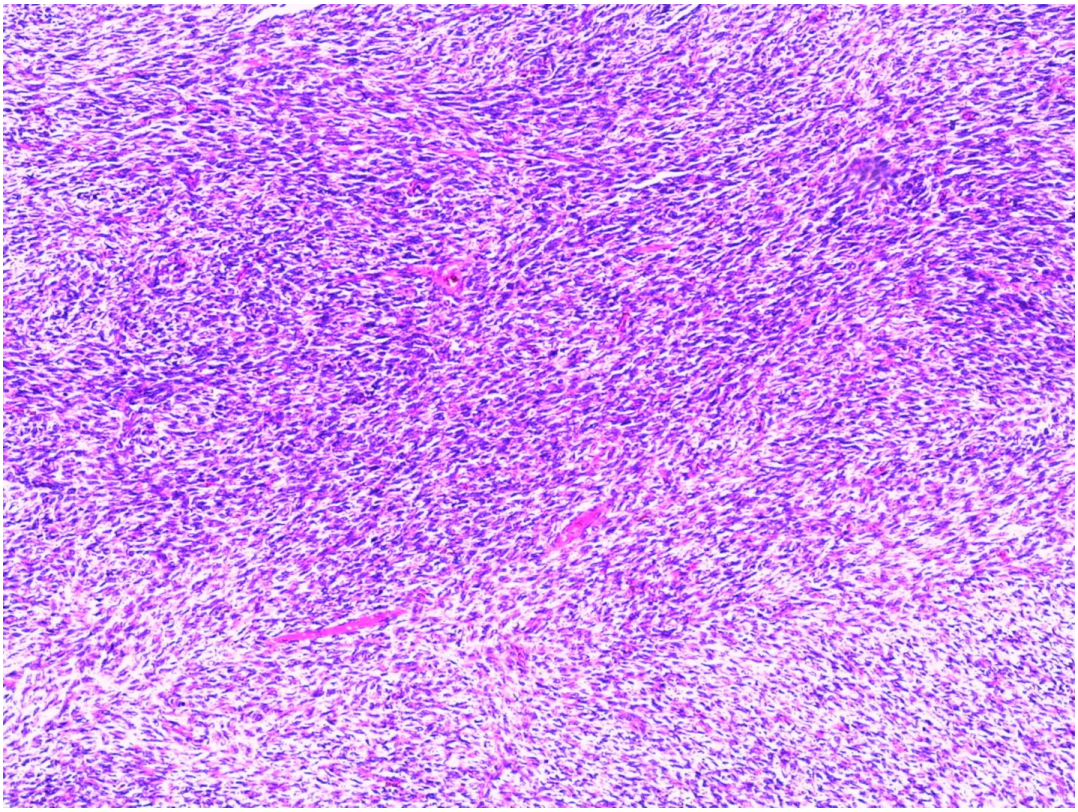

Figure 3: Histological images after HES staining and magnification x 100.

CONCLUSION

Fibrothecoma of the ovary is a generally benign tumor, its symptomatology is very varied, it can be included in several syndromes' associations, pelvic ultrasound combined with magnetic resonance imaging guides the diagnosis, its treatment is purely surgical and the diagnostic confirmation is essentially histological.

Conflicts of interest
The authors declare no conflict of interest.

Author contributions
All authors have also contributed to this work and have read and approved this manuscript.

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