

## Ovarian Fibrothecoma: A Case Report

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DOI: [10.36348/sjmpps.2023.v09i04.005](https://doi.org/10.36348/sjmpps.2023.v09i04.005)

| Received: 21.02.2023 | Accepted: 29.03.2023 | Published: 09.04.2023

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### Abstract

**Introduction:** Fibrothecal group tumours are part of the gonadal stromal and sex cord tumours (GSST) and represent 1-4.7% of all organic ovarian tumours and are usually benign. We felt it important to report a case in order to share our experience in the management of fibrothecal tumours of the ovary. **Observation:** This was a 51-year-old postmenopausal patient who was referred to the hospital for abdominal pain in the context of an abdominal mass. A clinical examination and abdominal ultrasound concluded that the left ovarian tumour was benign. A left annectomy was performed and the histological examination concluded that the tumour was benign. No tumour marker was measured and no CT scan was performed. The postoperative course was simple and the patient was followed for 3 months.

**Keywords:** Tumour, Fibrothecal, Menopause.

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### INTRODUCTION

Tumours of the fibrothecal group are part of the gonadal stromal and sex cord tumours (GSST). Fibrothecal tumours of the ovary are rare. They account for 1 to 4.7% of all organic ovarian tumours [1, 2]. These tumours are of chromosomal origin and contain spindle-shaped connective cells and thecal cells in varying proportions [3]. They are mostly benign and may be responsible for hormonal secretion, most often oestrogenic. We report a case of a fibrothecal tumour of the left ovary.

### OBSERVATION

This was a 51 year old postmenopausal patient with no particular medical or surgical history who came for an ordinary consultation for an abdominal mass of progressive onset with no triggering factors, particularly traumatic, which had been progressively increasing in volume for 2 years until it reached its current size. The

current episode is marked by the persistence of symptoms associated with the progressive appearance of abdominal pain without calming factor, of moderate intensity, without irradiation, without fever or vomiting for which she consulted a community health centre which referred her to us for treatment.

There was no notion of metrorrhagia, no leucorrhoea, no dyspareunia; no notion of weight loss or alternating diarrhoea and constipation. On general examination, we found a good general condition and well-coloured conjunctiva.

On physical examination, the abdomen was distended and breathing well, no collateral venous circulation (CVC), no laparotomy scar, the hernial orifices were free. Palpation revealed a pelvic mass of about 10 cm, extending beyond the umbilicus, firm in consistency, painless, irregular in contour, mobile in

relation to the superficial and deep plane. The examination of the other devices was unremarkable.

The abdomino-pelvic ultrasound examination concluded to a benign solid tumour of the mesentery (heterogeneous solid tumour mass; regular in outline with posterior shadow, non vascularised on Doppler, mobile; intra peritoneal; measuring 155X94cm).

The biological tests, in particular the Rhesus grouping came back O positive, the Blood Formulation Count with a haemoglobin level of 12.8g/dl and a neutrophilic polynuclear hyperleukocytosis of 15,000/mm<sup>3</sup>.

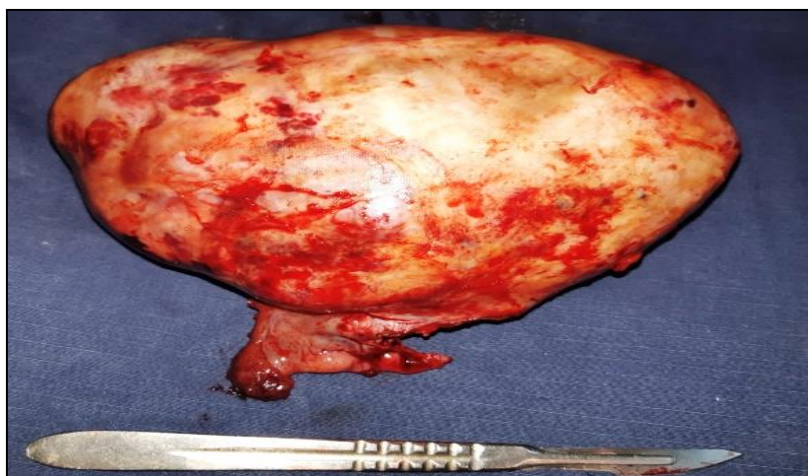
Our course of action was a programmed laparotomy after preoperative preparation. At coeliotomy, exploration allowed us to find a large,

mobile, pearly white tumour mass of firm consistency in the left ovary. Elsewhere there was no ascites or mesenteric adenopathy.

A left adnexectomy removing the tumour in one piece was performed. The peritoneal cavity was cleaned and closed.

Anatomopathological examination of the surgical specimen concluded that the tumour was a fibro-thematoma of the left ovary, 18 cm in diameter, with the tube without any particularity and without malignancy.

The postoperative course was simple, and after 8 days postoperatively, she was exected. Postoperative follow-up at three months was unremarkable.



**Fig 1: Surgical specimen of the left adnexa**

## DISCUSSION

Fibrothecal tumours of the ovary are rare and of stromal origin and contain a varied proportion of spindle connective cells and thecal cells.

They appear to be more common in older women in the menopausal period. In our case, it was a left ovarian tumour in a menopausal patient, which is consistent with the literature [1, 4, 5].

Fibrothecomas are tumours of the sex cord stroma with histological aspects intermediate between those of fibroids and thecomas [6].

In the latest World Health Organization classification, they are included in the class of tumours of the "thecoma-fibroma group" [4, 7]. They consist of a mixture of fibrous and thecomatous elements. The fibrous component consists of spindle cells configured in fascicles, while the thecomatous part is characterised by polygonal cells with abundant to moderate clear cytoplasm, either scattered or arranged in nests or clusters [8].

The classic tumour symptomatology is recurrent pelvic pain, enlargement of the abdomen in a patient in good general condition.

In general, most of these tumours have little effect on the general condition of the patients, which leads to the hypothesis of a benign tumour subject to histological examination. In 1-10% of cases, ovarian fibroma is associated with ascites [1], but this was not found in our case.

Compared to the thecoma, the fibrothecoma has no functional activity, more collagen deposits and fewer cells with cytoplasmic vacuolation. Compared to the fibroma, this tumour has more "collected" cells, with a paler cytoplasm and higher cellularity. The recognition of these tumours is very important, as they are benign and their complete removal is curative [8]. Our case did not present with endocrine syndrome, skin lesions or Demons Meigs syndrome.

Demon Meigs syndrome is very rare and occurs in 0.25% of ovarian tumours and most

commonly affects pre- and post-menopausal women between the ages of 40 and 50. [This syndrome was not considered in our case, as there was no ascites or pleural effusion.

Fibrothecal tumours may be associated with ascites and sometimes with elevated serum CA125 levels; this may be a component of Meigs syndrome [4, 10]. However, they may rarely be accompanied by a high level of tumour markers [11]. No markers were measured in our case although cases have been reported in the literature [12, 13].

As part of the diagnostic work-up, CT or MRI was not necessary as ultrasound alone suggested the diagnosis of a benign looking ovarian tumour.

The macroscopic appearance in our case is typical as it is firm in consistency, with rough surfaces and pearly white in colour (Figure 1). In our case, a left adnexectomy and histological examination were performed to confirm the diagnosis.

Although in the literature, radical treatment remains the appropriate choice in perimenopause and menopause [5], this procedure was not performed in our case because it was not approved by the patient.

The pathological examination of the surgical specimen concluded that the tumour was benign; this is consistent with the literature [14] which concluded that the majority of these tumours are benign.

The evolution after removal of these tumours is good, no case of recurrence has been reported in the literature; this could be explained by the operative technique which consists of performing an adnexectomy associated with a total hysterectomy. In our case, the patient was followed for 3 months without any complications.

## CONCLUSION

Large pelvic masses in menopausal women are most often of ovarian origin and generally benign with favourable outcome. However, only histological examination provides a definite diagnosis.

**Conflict of interest:** The authors declare no conflict of interest.

## REFERENCES

- Philippe, E., & Charpin, C. (1992). Pathologie gynécologique et obstétricale. Paris: Masson; p. 196-197.
- Sfar, E., Ben Ammar, K., Mahjoub, S., Zine, S., Kchir, N., & Chelli, H. (1994). Caractéristiques anatomo-cliniques des tumeurs fibrothécales de l'ovaire: à propos de dix-neuf cas en douze ans: 1981-1992. *Revue française de gynécologie et d'obstétrique*, 89(6), 315-321.
- Querleu, D. (1993). Tumeurs endocrines de l'ovaire. Paris: Encycl Med Chir« Gynécologie, 680, B20.
- Tavassoli, F. A., & Devilee, P. (2002). Pathology and Genetics of Tumours of the Breast and Female Genital Organs. Lyon, France: IARC Press. World Health Organization Classification of Tumours; Vol 5.
- Mahtate, M., Slaoui, A., & Lakhdar, K. (2022). Ovarian fibroma in a postmenopausal woman: A case report. *MOJ Clin Med Case Rep*, 12(3), 56-58.
- Angeles, R. M., Salem, F. L., & Sirota, R. L. (2005). A right ovarian mass in a 71-year-old woman with ascites and elevated CA 125 level. *Archives of pathology & laboratory medicine*, 129(5), 701-702.
- Renaud, M. C., Plante, M., & Roy, M. (2002). Ovarian thecoma associated with a large quantity of ascites and elevated serum CA 125 and CA 15-3. *Journal of Obstetrics and Gynaecology Canada*, 24(12), 963-965.
- Buy, J. N., & Vadrot, D. (2008). Tumeurs primitives non épithéliales de l'ovaire. *La Lettre du Gynécologue - n° 337*.
- Chechia, A., Koubâa, A., Makhoulouf, T., El Hitmi, N., Messaoudi, Y., Terras, K., & Mezni, F. (2001). Les tumeurs fibrothécales de l'ovaire. À propos de 12 observations. *Gynécologie obstétrique & fertilité*, 29(5), 349-353.
- Slaoui, A., Lazhar, H., Amail, N., Zerai, N., Lakhdar, A., Kharbach, A., & Baydada, A. (2023). Meigs syndrome: About an uncommon Case report. DOI:10.29328/journal.cjog.1001120
- Danilos, J., Kwaśniewski, W. M., Mazurek, D., Bednarek, W., & Kotarski, J. (2015). Meigs' syndrome with elevated CA-125 and HE-4: a case of luteinized fibrothecoma. *Przegląd Menopauzalny= Menopause Review*, 14(2), 152-154.
- Demons, A. (1887). Epanchements pleurétiques compliquant les kystes de l'ovaire. *Bulletin et Memoires de la Societe des Chirurgiens Paris*, 13, 771-776.
- El Ouazzani, H. C., Najjari, A., Seffar, H., Lakhdar, A., Baidada, A., Kharbach, A., ... & Khabouze, S. (2015). Les tumeurs fibrothécales de l'ovaire: à propos de six cas. *Médecine de la Reproduction*, 17(4), 318-322.
- Joseph, C. M., Morin, N. I., & Baudouin, Y. M. (2019). Le Syndrome De Demons-Meigs, A Propos D'un Cas Observé à l'Hôpital Du Cinquantenaire De Lubumbashi, *IOSR Journal of Dental and Medical Sciences (IOSR-JDMS)*, 18(5), 72-75. [www.iosrjournals.org](http://www.iosrjournals.org)