

Ovarian fibrothecoma: about 2 cases: Review of the literature

Fouad Ech chouyekh *, Badr El Marjani, Sofia Jayi, FZ Fdili Alaoui, Hikmat Chaara and M.A Melhouf

Department of Obstetrics Gynecology II, CHU Hassan II, Fez, Morocco.

World Journal of Advanced Research and Reviews, 2023, 19(02), 651–655

Publication history: Received on 22 June 2023; revised on 08 August 2023; accepted on 10 August 2023

Article DOI: <https://doi.org/10.30574/wjarr.2023.19.2.1541>

Abstract

Introduction: Ovarian fibroma is a rare tumor representing 1 to 4% of all ovarian tumours, poses a diagnostic problem preoperatively to assess their benign or malignant character, especially if associated with Demons Meigs syndrome. Clinically can be complicated making an array of surgical emergency. Magnetic resonance imaging (MRI) is more effective in diagnosing fibroids ovarian. Its treatment is surgical and the anatomopathological study confirms the diagnosis.

Presentation of the cases: 1) a 62-year-old patient admitted for chronic pelvic pain in whom examination finds a hypogastric arch with slight pelvic tenderness, pelvic ultrasound objectified a pelvic mass of 10 cm heterogeneous, in pre vesico uterine and on MRI a bulky mass above the bladder of strongly ovarian origin evoking a fibrothecoma ovarian. The patient underwent a laparotomy with the discovery of a mass 10 cm in the right appendix with performance of an adnexectomy and the anatomopathological examination returned in favor of ovarian fibrothecoma.

2) a 45-year-old patient consults in the emergency room for intense pelvic pain, the examination finds a defense at the level of the right iliac fossa with perception of a mass firm, on pelvic ultrasound: the fallopian tube is the seat of a hydrosalpinx with an image 7 cm hypoechogenic, BHCG negative, benefited from a mini laparotomy with discovery of a solid mass of 8x6 cm attached to the fallopian tube and the right ovary with two towers of turns, we carried out a detorsion then a resection of the mass and the examination pathology came back in favor of ovarian fibrothecoma

Conclusion: Ovarian fibroids are rare benign tumors, their diagnosis is based first on the clinic supplemented by explorations radiological especially ultrasound and in some cases MRI. Nevertheless, the diagnosis definitive is histological.

Keywords: Ovarian fibrothecoma; Benign tumor; Adnexectomy; Cystectomy; Anatomopathological examination; Towers of turns

1. Introduction

- Ovarian fibroma: is a solid tumor of the gonadal stroma representing 1 to 4% of all ovarian tumors (1,4,5,6) often posing diagnostic problems, on the one hand to affirm their organicity and on the other hand to appreciate their benign or malignant character.
- It is difficult to diagnose preoperatively and generally mistaken for a uterine fibroid due to the similar echogenicity of the two lesions.
- Magnetic resonance imaging is more effective in confirming the uterine or ovarian nature of a latero-uterine solid mass (4,5,7).
- The treatment of ovarian fibroma is surgical and the anatomopathological study confirms the diagnosis (4,8).

* Corresponding author: Fouad Ech chouyekh

2. Presentation of cases

2.1. Case 1

- This is a 62-year-old patient, postmenopausal.
- Operated for herniated intervertebral disc 12 years ago, carrying a scarred uterus, G2P2.
- Admitted for chronic pelvic pain (progressing for 1 year) associated with an abdominopelvic mass.
- In whom the general examination finds a stable conscious patient, BMI at 24.8 with a hypogastric arch, and on the gynecological examination: a uterus measuring 12 weeks, slight tenderness on uterine mobilization, presence of a mass seeming to be at the expense of the uterus, which is difficult to explore and of firm consistency.

2.2. Pelvic ultrasound

Uterus increased in size in relation to an anterior corporeal myomatous formation of type 4, with the presence of a pelvic mass of more than 10 cm in long axis heterogeneous non vascularized, in pre vesico uterine, within it, a anechoic image, is it an ovarian or digestive mass?

MRI brought back by the patient showed an 8cm uterus, site of a few myomatous foci with a voluminous pelvic tissue mass of macrolobulated shape, sitting above the bladder lateralized on the right, with a liquefied center raising strong doubts about its right ovarian origin, first evoking an ovarian fibrothecoma.

- The patient underwent a laparotomy with the discovery of a benign aspect bilobed mass measuring 10 cm at the expense of the right appendix suggesting a fibrothecoma (figure 1)



Figure 1 Per operative image of the right ovarian fibroma

- Performing a right appendectomy (figures 2-3) + multiple biopsies + omentectomy and peritoneal cytology
- The postoperative follow-up was simple and the histopathological examination returned in favor of ovarian fibrothecoma.



Figure 2 and 3 Images of the right adnexectomy encompassing the ovarian fibroma

2.3. CASE 2

- This is a 45-year-old patient, multiparous, still having menstruation.
- she Consulted in the emergency room for pelvic pain evolving for a month with a recent worsening more marked on the right side.
- in whom the examination found a defense at the level of the right iliac fossa with perception on palpation of a mass of 5 cm of firm consistency. The gynecological examination was otherwise without any particularity
- The paraclinical examinations found a negative BHCG and on the pelvic ultrasound the fallopian tube was the seat of a 3 cm hydrosalpinx associated with a hypoechoic image with a center heterogeneous 7x7 cm.
- The clinical picture making suspect a torsion of appendix,
- The patient underwent a mini laparotomy with the discovery of a solid mass with regular contours, round 8x6 cm attached to the fallopian tube and the right ovary with two turns of turns (figures 4 and 5).



Figure 4 and 5 Intraoperative images of twisted right ovarian fibroma with 2 turns of turns in the patient

The procedure consisted of detorsion and then resection of the mass while preserving the right ovary (figure 6).

- The postoperative follow-up was simple and the definitive pathology examination after immunohistochemistry came favor of an ovarian fibroid.



Figure 6 Image after detorsion and resection of the mass showing a right ovary in good condition.

3. Discussion

3.1. Definition

- Ovarian fibroma accounts for 5 to 6% of benign ovarian tumors (9).
- Develops from muscle fibers and connective cells in varying proportions, surrounded by a vascular pseudocapsule (7).
- The circumstances of discovery are very variable: fortuitous during an exploration assessment of a pelvic mass or in front of non-specific symptoms (chronic pelvic pain : the case of our first patient or acute as is the case of our second patient, sometimes an impact on the urinary, digestive, vascular or nervous systems) (8).

3.2. Clinic

- The more frequent occurrence of these tumors in elderly patients (between 20 and 65 years old) and willingly postmenopausal, is underlined by most authors (1,11-13)
- Clinically, the giant ovarian fibroma presents as a solid, mobile mass with a regular surface of very variable size (11).
- The major difficulty is to differentiate between ovarian fibroids and other solid ovarian tumors (1).
- Most often unilateral in 90% of cases.
- Possibly bilateral in 4-8% of patients.
- Multiple in 10% of cases and especially in the context of Gorlin's syndrome (14).
- This benign tumor may be associated with ascites and pleurisy within the framework of the Demons Meigs syndrome, which will disappear after its excision (11,15).

3.3. Paraclinic

Radiological exploration is often insufficient to give a precise diagnosis:

- The ultrasound appearance is that of an echogenic mass associated with multiple cones of shadow which are not related to calcifications but to the attenuation of the ultrasound beam produced by the fibrous tissues (8,16).
- If the formation does not appear dependent on the uterus or the ovary, the color Doppler often makes it possible to make the differentiation. Indeed, there is a peripheral hypervascularization in the subserous myoma which does not exist in the ovarian fibroma.
- In our case, the ultrasound did not make it possible to conclude.
- Magnetic resonance imaging (MRI) could be offered.
- In MRI, there are two essential signs allowing the diagnosis of ovarian fibroma: the mass appears with a weak signal in T2 and in MRI angiography, there is no vascularization in the arterial phase nor any contrast uptake in the parenchymal phase, so that there is a small contrast enhancement in the late phase. It may be the site of hemorrhage, edema, cystic transformation or calcifications (6,16,17).
- But in the context of the emergency, this examination cannot be carried out: this is the case of our second patient, unlike the first MRI is carried out allowing to pronounce on the diagnosis.

3.4. Differential diagnosis

- The differential diagnosis with subserosal uterine fibroids is often difficult since their morphological characteristics and their signal are similar to those of ovarian fibroids (6).
- Thus, the distinction with a malignant form remains difficult, especially since there is tissue degeneration within the fibroid (8,18).

3.5. Treatment

The treatment of ovarian fibroids is surgical, excision with preservation of the ovarian tissue is the intervention of choice in young women, while adnexectomy, often bilateral, is justified in women in peri or postmenopause (11,19).

3.6. Anapath

- Diagnostic certainty is based on histological examination, ovarian fibroids are mesenchymal tumors composed of the intersection of bundles of spindle-shaped fibroblasts producing collagen in large quantities.
- Larger lesions may contain areas of cystic degeneration and varying degrees of myxoid remodeling (6).

4. Conclusion

• Ovarian fibroids are rare benign tumors, their diagnosis is based primarily on the clinic and radiological explorations of which ultrasound is the first-line examination supplemented in some cases by magnetic resonance imaging. However, the definitive diagnosis is histological. Therapeutically, lumpectomy is the intervention of choice in young women.

Compliance with ethical standards

Disclosure of conflict of interest

No conflict of interest to disclosed.

References

- [1] C-T.Cissé,P-M.Ngometal:fibrome de l'ovaire associé à un syndrome de Demons- Meigs et à une élévation du CA125;j gyneco l'obstet biol reprod,2004;1:251-254.
- [2] MineI slimye,E O zturk et al: primary ovarian leiomyoma:a case report,international journal of surgy case reports5,2014;2:665-668.
- [3] V C Lema, A.N. Masside et al:bizar representation of bilateral ovarian leiomyoma:a case report;Tanzania journal of health research,2013;3:vol15,Num4.
- [4] S Kojiro,Y Tomioka et al:primary leiomyoma of the ovary:a report of 2 resected cases;Kurume medical journal 2003,4:169- 172.
- [5] Z Najmi,A Mehdizadehkashi et al:laparoscopic approach to a large ovarian fibroma:a case repport; journal reprod infertile 2014;5:57-60.
- [6] H B erment,A Genevois et al:fibromes ovariens multiples chez une patiente atteinte du syndrome de Golin; J radiol 2010;6:917-20.
- [7] Yves Ardaens: imagerie des fibromes; journal de gynecologie obstetrique et biologie de la reproduction 2007;7:23-30.
- [8] A Roue,C Laboissee et al: leiomyome pelvien extra uterin:diagbnostic et prise en charge; j gyneco obst biol reprod 2007;8:403-408.
- [9] H Omrani,I H BonHoa et al:fibromes ovariens récidivants dans le cadre du syndrome de Golin: à propos d'un cas;J gynecolobst biol reprod2010;9:584-587.
- [10] T Tamada,T Sone et al:M R I apparence of primary giant ovarian leiomyoma in hysterectomised woman; the biritish journal of radiology 2006;10:126-128
- [11] A Akharraz, H Fazzazi et al:les tumeurs fibrothécales de l'ovaire:demarche diagnostique et thérapeutique: à propos de 2 cas; international journal of innovation and scientific research 2015;11:275-280.
- [12] C Gurkan Zorlu,S C engiz et al : primary ovarian leiomyoma : a case repport; gyneco lobstet invest 1993;12:191-192.
- [13] B Parikh,Pragna Sharma et al: ovarian fibroma presented as Meigs syndrome: a case repport; GCSMC jmedsci 2015;13:126-127.
- [14] M Boujoual,I Hakimi et al:large twisted ovarian fibroma in menopausal women: a case repport;panAfrican journal 2014;14:322.
- [15] B Hanane,M Sana e tal: pseudo Meigs syndrome: a propos d'un cas; pan African journal2 014;15:184.
- [16] J N Buy,D Vadrot: tumeurs primitives non epitheliales de l'ovaire; la lettre du gynecologue num 337,2008;16.
- [17] J P Rouanet, A Maubon et al:l'imagerie des tumeurs benignes de l'ovaire ;j radiol 2000;17:1823-1830.
- [18] T Yoldemir,K Atazayan et al: agiant extra uterine fibroma originating from an utero ovarian ligament initially diagnosed as an ovarian tumour;marmara medical journal 2014;18:132-3.
- [19] E Tarcoveau,G Dimofte et al:ovarian fibroma in the Era of laparoscopic surgy: a general surgeon's experience; acta chir belg 2007;19:664-669.