

**GIANT OVARIAN FIBROMA MISDIAGNOSED AS SUBSEROSAL UTERINE  
LEIOMYOMA: A CASE REPORT AND LITERATURE REVIEW****Wissal Zahir\*, Chaimaa Nadim, Samia Dagdag, Khalid Fathi, Fatima El Hassouni, Samir Bargach**

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**ABSTRACT**

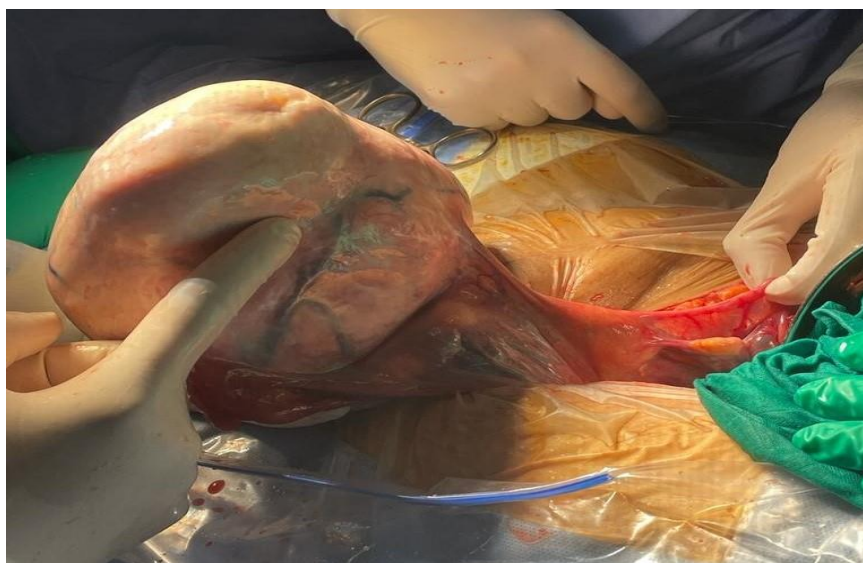
Ovarian fibroma is usually misdiagnosed preoperatively as a uterine leiomyoma. We present the observation of a patient consulting for abdominal pain with progressive increase in abdominal volume. Clinical examination revealed a firm abdomino-pelvic mass reaching the umbilicus. Pelvic ultrasound was in favor of a subserous uterine fibroid. At laparotomy, the solid ovarian mass came from the left ovary and the anatomopathological examination confirmed the diagnosis of ovarian fibroma.

**KEY WORDS:** Giant fibroid, subserous fibroid, Ovary.**INTRODUCTION**

Ovarian fibromas are solid tumors belonging to the sex cord stromal cell tumors of the ovary. They are the most frequent benign solid tumors of the ovary.<sup>[1]</sup> Ovarian fibroid is usually difficult to diagnose preoperatively and often misdiagnosed as a uterine fibroid because of the solid nature of the mass and the sonographic similarity of the 2 lesions. Magnetic resonance imaging is more effective than ultrasound in confirming the uterine or ovarian origin of a solid latero-uterine mass.<sup>[2, 3, 4]</sup> The treatment of ovarian fibroma is surgical removal and anatomopathological study allows confirmation of the diagnosis.<sup>[2,5]</sup>

**OBSERVATION**

This is a 60-year-old female patient, G8P5 (5 alive children delivered vaginally), with no notable pathological history, consulting for pelvic pain dating back 6 months with progressive increase in abdominal volume, without other associated symptoms. The whole evolving in a context of conservation of the general state. The clinical examination found a firm abdominal-pelvic mass reaching the umbilicus. Pelvic ultrasound revealed a subserous myoma 20 cm in diameter. The patient underwent a laparotomy which revealed a left ovary with a large solid mass of about 20 cm long (**figure 1**). A left adnexectomy was performed. The postoperative course was without complications.

**Figure 1: Surgical exploration showing a left ovary with a voluminous mass of about 20 cm long axis.**

## DISCUSSION

Ovarian fibromas are stromal tumors of the sex cords of the ovary arising from the connective tissue of the ovarian cortex. They are rare benign solid tumors that represent 1-4% of all ovarian tumors<sup>[3]</sup> and 5-6% of benign ovarian tumors.<sup>[6]</sup>

They are usually asymptomatic and have the potential to grow to a very large size. The circumstances in which they are discovered are therefore very variable: incidental, during an investigation of a pelvic mass or in the presence of non-specific symptoms in the case of large fibroids (chronic pelvic pain, impact on the digestive, urinary, vascular or nervous systems).<sup>[5]</sup> Several authors have reported that the occurrence of these tumours is more frequent in elderly patients who are usually postmenopausal<sup>[7, 8, 9]</sup>, as in the case of our patient.

This benign tumor is most often unilateral. It may be associated in 1% of cases with ascites and pleurisy as part of the Demons Meigs syndrome, a condition that combines the triad of benign ovarian tumor, ascites and pleural effusion (usually unilateral and on the right side), which will regress after ablation.<sup>[8, 10]</sup>

Elevated serum CA-125 levels may be observed with an ovarian fibroma, raising the suspicion of an ovarian malignancy, the risk of malignancy index (RMI) is a valuable tool to orient the diagnosis.

On ultrasound, the ovarian fibroma most commonly appears as an echogenic mass with attenuation of the ultrasound beam produced by the fibrous tissues; it may thus resemble a pedunculated subserosal uterine fibroid. Color Doppler can often make the difference. Indeed, there is peripheral hyper vascularization in the subserous myoma which does not exist in the ovarian fibroma.<sup>[11]</sup>

If ultrasound is inconclusive, magnetic resonance imaging (MRI) may be suggested.<sup>[3, 13]</sup>

- T1: fibroma usually have a low homogeneous signal intensity

- T2 and MRI angiography

- fibroma appear like well circumscribed masses with low signal intensity
- can contain scattered hyperintense areas representing edema or cystic degeneration
- the presence of a T2-hypointense band separating the tumor from the uterus on all imaging planes is also considered a characteristic sign

Ovarian fibroma is classified as O-RADS MRI 2.

On CT scan (computed tomography), fibromas usually present as diffuse, slightly hypointense masses with poor and very slow contrast uptake.

Ovarian fibromas are often misdiagnosed preoperatively as pedunculated subserosal leiomyomas since their morphologic features and signal are similar<sup>[12]</sup>, as was

the case in our patient. Other differential diagnoses include thecomas and fibrothecomas; which tend to have a brighter signal on T2 given the edema and cystic degeneration, in addition contrast uptake may be seen given the vascularization of thecal cells. Ovarian fibromas can also be confused with a malignant tumor, especially since there is tissue degeneration within the fibroma.<sup>[5, 14]</sup>

Treatment of ovarian fibromas is surgical, with removal of the fibroid with preservation of the ovarian tissue being the procedure of choice in young women, whereas adnexectomy is justified in peri- or post-menopausal women.<sup>[8, 15]</sup>

## CONCLUSION

Ovarian fibromas are rare benign tumours, their diagnosis is based on a combination of clinical and radiological arguments; ultrasound in the first instance completed in certain situations by magnetic resonance imaging. Nevertheless, the diagnosis of certainty is histological. Therapeutically, fertility-conserving surgery in young patients and radical treatment in postmenopausal women is the current reference treatment.

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