

**GIANT OVARIAN FIBROMA MIMICKING A SUBSEROUS UTERINE MYOMA: A
CASE REPORT**

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ABSTRACT

Ovarian fibromas are uncommon benign neoplasms representing 2% of all ovarian tumors. Preoperative diagnosis of ovarian fibromas is difficult not only due to its rarity, but also owing to the resemblance of its clinical and imaging features with other neoplasms, especially uterine myoma. The authors report a case of 43-year-old woman presented with giant abdominal mass. Preoperative diagnosis of a subserous uterine myoma was made on the basis of clinical examination and radiological imaging. Intraoperative findings were a large mass originating from the right ovary which was removed and sent for frozen section examination confirming the diagnosis of an ovarian fibroma. Despite its rarity, ovarian fibroma should be considered in the differential diagnosis of a giant abdominal mass. Its definitive diagnosis and treatment requires surgical removal with intraoperative frozen section.

KEYWORDS: Ovarian fibroma; uterine myoma; surgery.

INTRODUCTION

Ovarian fibromas are uncommon benign neoplasms representing approximately 2% of all ovarian tumors.^[1] Occasionally, they can rapidly double in size, reaching large diameter resulting in what is termed giant ovarian fibroma and mimicking other neoplasms, especially uterine myoma. We present a case of giant ovarian fibroma which was erroneously diagnosed preoperatively as a subserous uterine myoma.

CASE REPORT

A 43-year-old multiparous woman presented in our department for a gradually increasing abdominal swelling noticed seven months before. She denied any genito-urinary or gastrointestinal symptoms. On general examination, she was afebrile with normal vital signs. There was no icterus or edema. Abdominal examination showed a no painful mass, corresponding to 32 weeks uterine size (**Figure 1**). The mass was firm in consistency with restricted mobility and its lower border could not be reached. The liver and spleen were not palpable. Ultrasound revealed a vascularized hypoechoic solid mass occupying the entire abdomen and pelvic cavity; both ovaries and uterus were not seen. Abdomino-pelvic Computed Tomography (CT) scan objectified a large polylobulated lesion, measuring 44 cm × 32 cm, slightly hypoattenuating with poor contrast enhancement, suggestive of subserous uterine myoma (**Figure 2**). There was no free fluid in the peritoneal cavity. Routine laboratory tests, Chest X-Ray and tumor

markers were within normal limits. An exploratory laparotomy with myomectomy was planned. Under general anesthesia, low midline incision extending up to the umbilicus was realized. After opening the parietal peritoneum, a polylobulated and hemorrhagic mass originating from the right ovary was noted; it was so large that it could not be exteriorized without a large abdominal incision. Right salpingo-oophorectomy was performed and sent for frozen section examination which revealed a benign ovarian fibroma. Uterus, left ovary and fallopian tube were grossly normal. Total hysterectomy with left salpingo-oophorectomy was done (**Figure 3**). The postoperative period was uneventful and the patient was discharged on the fourth day after surgery with final histopathologic report of ovarian fibroma.



Figure 1: Preoperative view of the mass.

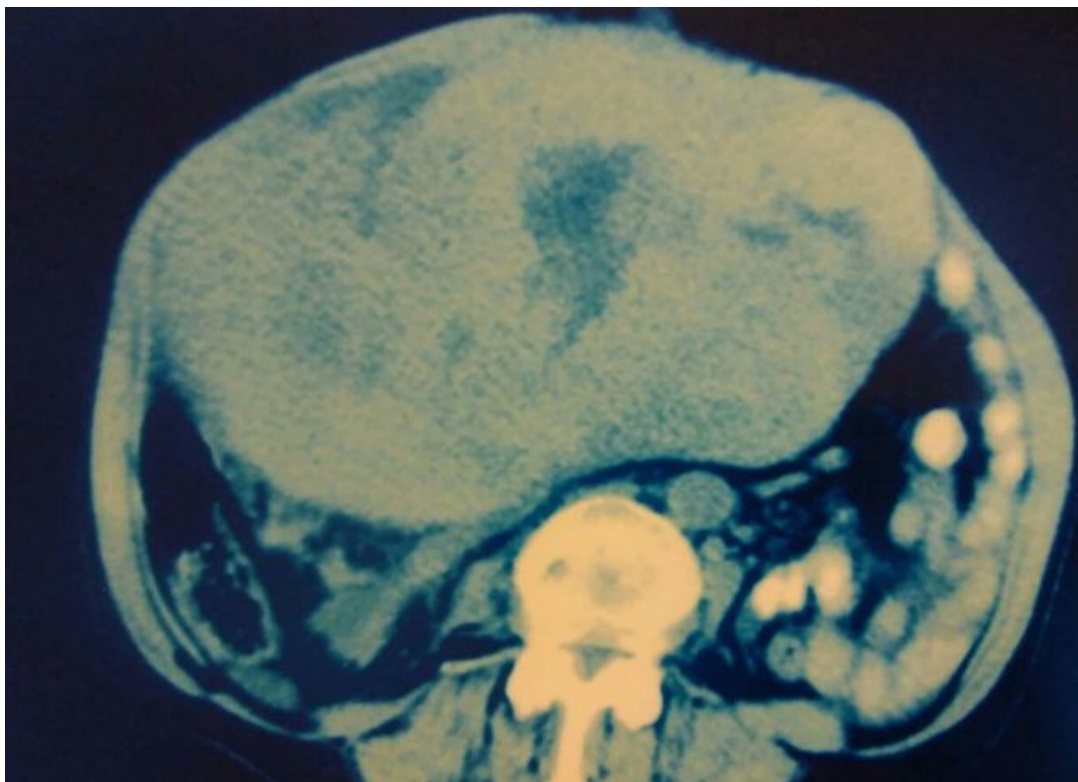


Figure 2: Abdominal CT scan showing a tissular polylobulated lesion occupying the entire abdomen cavity.



Figure 3: Macroscopic view of the resected specimen.

DISCUSSION

Ovarian fibroma was first described by Astruc in 1743 and classified under the sex cord stromal tumors of the ovary.^[2] It mainly affects women between 20 and 65 years with a higher incidence in the fifth and sixth decades.^[3] Ovarian fibroma can also occur in children, probably a manifestation of a rare hereditary condition called nevoid basal cell carcinoma syndrome.^[4] The tumor can be bilateral and multiple in 10% of cases, or associated with ascites and hydrothorax in Meigs' syndrome.^[5] There are no specific clinical signs of ovarian fibroma and in the vast majority of reported series, the preoperative diagnosis was correctly made in approximately 21% of cases.^[6] As was in our patient, the tumour is not often diagnosed accurately until the time of surgery and the main differential diagnosis is uterine fibroma. In a retrospective study including 23 patients with an operative diagnosis of an ovarian fibroma, about one third of them were erroneously diagnosed as uterine fibroma.^[6] Recently, Shetty et al. described a case of large ovarian fibroma masquerading as a uterine fibroid in a 37-year-old woman.^[7] Sonographic appearance of ovarian fibroma can be variable and 18% of them appear cystic despite their solid nature.^[6] However, two clues can help distinguishing ovarian fibroma from uterine myoma. Firstly, when the ultrasound scan shows a solid pelvic mass adjacent to the uterus but without a clear connection, the diagnosis of a subserosal uterine fibroma should be made with caution, and the possibility of an ovarian fibroma must be considered, unless a normal ovary can be clearly seen on the same side.^[6] Secondly, a well vascularized solid mass with high speed flow is suggestive of a subserosal fibroma, while a less

vascularized tumor with low speed flow points towards the diagnosis of an ovarian fibroma. In the present case, given large diameter of the tumor, uterus and ovaries were not seen and the study of speed flow was not performed. Supplementary CT scan and Magnetic Resonance Imaging (MRI) may help to improve the diagnosis accuracy. Usually, ovarian fibromas manifest as diffuse, slightly hypoattenuating masses with very slow contrast enhancement on CT and show marked T1 and T2 low signal intensity on MRI. A band of T2 hypointensity separating the tumor from the uterus on all imaging planes is also considered a characteristic feature. In a study to assess the accuracy of MRI, particularly dynamic MRI, in differentiating ovarian fibromas from subserosal uterine leiomyomas, it was found that dynamic contrast-enhanced-MRI can distinguish ovarian fibromas from uterine myomas and should be used if sonography fails to show the origin of a pelvic mass.^[8] As in other solid ovarian tumors, surgical removal of ovarian fibroma is recommended because of the low probability of focal fibrosarcomatous changes. Conservative management by resection of the tumor or unilateral salpingo-oophorectomy is indicated for women in reproductive age, while hysterectomy with bilateral salpingo-oophorectomy should be preferred in peri and postmenopausal patients, especially when the benign nature of the ovarian tumor is in doubt. Laparoscopy can be an effective and safe alternative approach for removing small-to-moderate-sized ovarian fibromas.

CONCLUSION

Although the ultimate diagnosis of ovarian fibromas depends on the intraoperative findings and should be

confirmed histologically, a good preoperative assessment is important for treatment planning and patient counseling.

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

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