

## Ovarian Cystadenofibroma: Case Report

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## ABSTRACT

Ovarian cystadenofibromas are rare ovarian tumors. The clinical presentation is non-specific. The diagnosis can be made on imaging or anatomopathology. The appearance may be in favor of a malignant tumor. However, the surgeon must remain vigilant to avoid radical surgery in the face of this benign tumor.

**Keywords**

Ovarian cystadenofibromas, Tumors, Ovary.

**Introduction**

Ovarian cystadenofibromas are uncommon ovarian tumors containing a dense fibrous stroma associated with epithelial cystic components. These tumors are classified according to epithelial cell type: serous, endometrioid, mucinous, clear-cell and mixed. The serous type is the most common (75%) [1,2]. The degree of epithelial proliferation is used for the classification of benign, borderline and malignant tumours, although malignant cystadenofibroma is extremely rare [3,4]. In most cases, this tumour affects a single ovary and rarely both.

**Case Report**

We report the case of a 23-year-old female patient. Who presented for a seven-month history of pelvic pain with progressive symptoms of pelvic pressure. Clinical examination revealed an abdominal mass reaching the umbilicus.

Abdominal ultrasound revealed a voluminous mass occupying the entire pelvis and extending over the abdomen. It was heterogeneous and well limited, measuring 13x12 cm, with no clear view of the uterus and adnexa. A pelvic MRI was performed. The mass measured 180x170x120mm, solid-cystic, with a dominant solid portion, roughly oval, well limited, with bumpy contours. It was heterogeneously enhanced after injection of gadolinium, bordering areas of necrosis whose origin was probably right ovarian. There was a small pelvic effusion (Figure 1).

Tumor markers were negative, with levels of: CA125:10 IU/mL, AFP: 1ng/mL, CA19.9: 14.1 IU/mL and HCG<1 IU.

Surgical exploration revealed a suspicious-looking solidocystic mass on the right ovary measuring 18 cm long, associated with a moderate peritoneal effusion. A right cystectomy, multiple biopsies and peritoneal fluid sampling were performed (Figure 2).

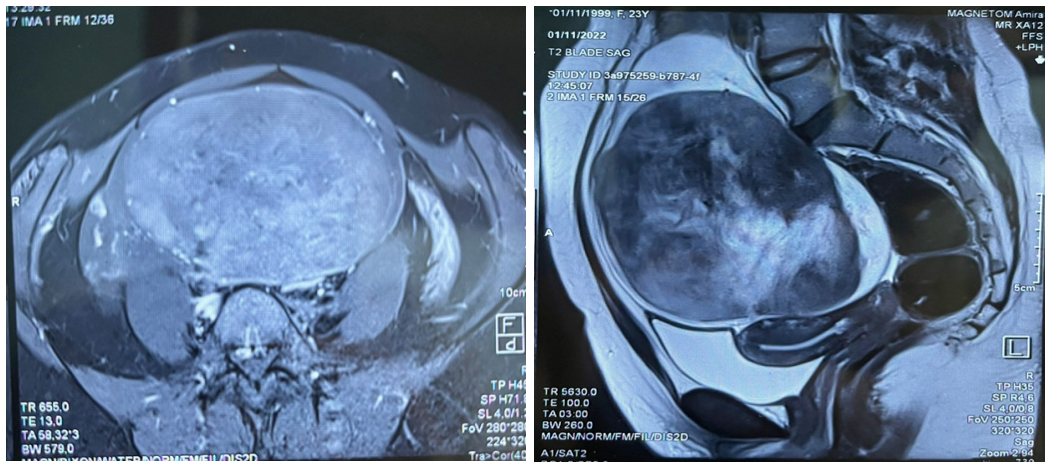
Anatomopathological study revealed a right ovarian cystadenofibroma with no signs of malignancy.

Post-operative follow-up was straightforward, and the patient was discharged on day 3 of the operation.

**Discussion**

Ovarian cystadenofibromas are relatively rare variants of epithelial tumors of the ovary. They account for 1.7% of all benign ovarian tumors and occur in women aged 15 to 65. Ovarian cystadenofibromas are neoplasms containing both benign epithelium and stroma. Ovarian adenofibromas are tumors with neoplastic glandular elements and predominantly benign stroma. When large cystic spaces are present in the glandular elements, the tumor is termed an ovarian cystadenofibroma. The latter belongs to the surface epithelial tumors, which contain varying amounts of fibrous stroma in all subtypes. The subtypes of this tumor are benign, proliferative and malignant, classified according to the cytological characteristics of the glandular element [5,6].

Their ultrasonographic and macroscopic appearance is suggestive of malignancy: presence of adenoid vegetations, thickened



**Figure 1:** Large heterogeneous mass in favour of an ovarian cystadenofibroma.



**Figure 2:** Ovarian cystadenofibroma.

partitions and walls, suspicious intracystic fluid, anarchic vascular system of the ovarian cortex. Ovarian cystadenofibromas are important from an imaging point of view, as they may have solid parts and thus mimic malignant neoplasms. Although the true incidence of false-positive findings of malignancy in an ovarian cystadenofibroma is uncertain, some investigators have reported that this type of tumor can be diagnosed as malignant on imaging [7-10].

Other ovarian tumors may show dark signal intensity borders on T2-weighted images. Endometriotic cysts may contain a peripheral rim of low signal intensity, representing hemosiderin or a fibrous capsule. [11] Ovarian masses with a fibrous component,

including fibroma, fibrothecoma and Brenner's tumor, are benign tumors with a predominantly solid component, showing low signal intensity on T2-weighted images [12,13]. Metastases with a strong fibrous component, particularly those originating from the gastrointestinal tract, often present hypointense areas on T2-weighted images with strong enhancement. [14] Stroma ovarii may have solid components, multilocular cystic components and multilobulated surfaces. Cystic locules contain viscous gelatinous material and show low signal intensity on T2-weighted images, without contrast enhancement. A characteristic clinical context such as associated hyperthyroidism and preoperative scintigraphy may be helpful in differentiating struma ovarii from other ovarian tumours [14].

It is therefore important for surgeons not to ignore false concerns about the morphological appearance of these ultimately benign tumours. In such a context, it is important to remember the value of an extemporaneous examination in the management of an ovarian tumour suspected of malignancy. This should be requested if the tumour presents worrying macroscopic signs, and if the results of this examination are likely to modify the therapeutic strategy. However, if the extemporaneous examination is not feasible or uncertain, this should prompt the surgeon to defer heavy first-line surgical treatment.

## Conclusion

cystadenofibromas of the ovary may present macroscopically and radiologically as if they were cancerous, leading to an erroneously aggressive surgical approach.

## References

1. Czernobilsky B, Borenstein R, Lancet M. Cystadenofibroma of the ovary. A clinicopathologic study of 34 cases and comparison with serous cystadenoma. *Cancer*. 1974; 34: 1971-1981.
2. Serov SF, Scully RE, Sobin LH. *Histological typing of ovarian tumours*. Geneva: World Health Organization. 1973.
3. Outwater EK, Siegelman ES, Talerman A, et al. Ovarian fibromas and cystadenofibromas: MRI features of the fibrous component. *J Magn Reson Imaging*. 1997; 7: 465-471.
4. Cho SM, Byun JY, Rha SE, et al. CT and MRI findings of cystadenofibromas of the ovary. *Eur Radiol*. 2004; 14: 798-804.
5. Czernobilsky B, Borenstein R, Lancet M. Cystadenofibroma of the ovary: a clinicopathologic study of 34 cases and comparison with serous cystadenoma. *Cancer*. 1974; 34: 1971-1981.
6. Kao GF, Norris HJ. Cystadenofibroma of the ovary with epithelial atypia. *Am J Surg Pathol*. 1978; 2: 357-363.
7. Outwater EK, Siegelman ES, Talerman A, et al. Ovarian fibromas and cystadenofibromas: MRI features of the fibrous component. *J Magn Reson Imaging*. 1997; 7: 465-471.
8. Alcázar JL, Errasti T, Mínguez JA, et al. Sonographic features of ovarian cystadenofibromas: spectrum of findings. *J Ultrasound Med*. 2001; 20: 915-919.
9. Atri M, Nazarnia S, Bret PM, et al. Endovaginal sonographic appearance of benign ovarian masses. *Radiographics*. 1994; 14: 747-760.
10. Ovadia J, Godlan G. Ovarian masses in postmenopausal women. *Int J Gynecol Obstet*. 1992; 39: 35-39.
11. Gougoutas CA, Siegelman ES, Hunt J, et al. Pelvic endometriosis: various manifestations and MR imaging findings. *AJR Am J Roentgenol*. 2000; 175: 353-358.
12. Sala EJ, Atri M. Magnetic resonance imaging of benign adnexal disease. *Top Magn Reson Imaging*. 2003; 14: 305-327.
13. Moon WJ, Koh BH, Kim SK, et al. Brenner tumor of the ovary: CT and MR findings. *J Comput Assist Tomogr*. 2000; 24: 72-76.
14. Joja I, Asakawa T, Mitsumori A, et al. Struma ovarii: appearance on MR images. *Abdom Imaging*. 1998; 23: 652-656.