

# Large Benign Ovarian Tumor Mimicking Late Stage Malignant Ovarian Tumor

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**Abstract :** Ovarian fibrothecoma is a rare, benign neoplasm of the sex cords and stroma of the ovary. Patients may present with abdominal pelvic pain and or distension, and sometimes postmenopausal bleeding. Large tumors (> 10cm) are often associated with pleural and peritoneal effusion mimicking an advanced ovarian malignancy (Deimon -Meigs syndrome). We report 2 cases of giant fibrothecoma associated with ascites and pleurisy. Both patients were postmenopausal. The ovarian tumor was discovered during an increase in abdominal volume in the first patient and as part of the etiological workup of encysted pleurisy in the second. The clinical examination made it possible to objectify a tumor with abdominopelvic development of size greater than 10 cm, the clinical examination also noted, in the two patients, a right basithoracic dullness in favor of a pleurisy and an ascites of average abundance suggesting in the first place a malignant tumor of the ovary, with peritoneal carcinoma. the two patients underwent a pelvic ultrasound, supplemented by an abdominal pelvic CT scan objectifying the presence of a large ovarian mass with pleural and peritoneal effusions. Exploratory laparotomy was required in both patients and underwent an extemporaneous examination which was consistent with the definitive pathological examination in both patients. Both patients underwent total hysterectomy with bilateral adnexitomy and omentectomy with multiple biopsies as the clinical picture was highly suggestive of malignancy. The postoperative follow-up was simple with total regression of peritoneal and pleural effusions in the two cases of Demons-Meigs syndrome. The definitive pathological examination revealed a fibrothecoma. Fibrothecal tumors remain a real challenge from a diagnostic and therapeutic point of view. The fear of cancer is even greater in the presence of Demons-Meigs syndrome. The management of these tumors requires a good clinical and radiological analysis, and it is the histological examination that confirms the diagnosis. The surgery corresponds, in post-menopausal patients, to a hysterectomy with bilateral adnexitomy, while conservative treatment by unilateral adnexitomy is entirely justified in young women who still want fertility.

Key words: Fibrothecoma, Deimon Meigs Syndrome, Ascites, Pleurisy

## Introduction:-

Demons-Meigs syndrome was first described in Mali in 1887 by Albert Demons [1]. Meigs et al, in 1937 discovered identical cases and made relevant studies [1,2]. The definitive treatment of effusions is based on surgical excision of the ovarian tumor [1,2]. The most frequently reported tumors are fibroids and thecomas [3]. Before the anatomopathological examination of the surgical specimen, this rare syndrome often raises fears of ovarian neoplasia due to the tumor size, the existence of ascites and the significant elevation of CA 125 [4]

## Observation N°1 :

A 73-year-old multiparous patient with no personal or family history was referred from the pulmonology department for an abdominopelvic mass discovered following an encysted right pleural effusion. The clinical examination revealed significant ascites and a palpable abdominopelvic mass lateralized to the right. This mass was clinically well-defined, hard, mobile, and measuring 27 cm. The pulmonary examination showed a right pleural effusion syndrome. On ultrasound, this mass appeared to be tissue-based, heterogeneous, multilobed, and probably of ovarian origin. There was also significant ascites. Additional imaging by TAP CT showed compressive right hydropneumothorax, significant peritoneal effusion, and the ovarian tumor measuring 24 cm by 15 cm. Serum CA 125 was not performed. An exploratory laparotomy was performed. Surgical exploration noted a hard, smooth tumor, developed at the expense of the right ovary, without exocystic vegetation or associated peritoneal lesions. The contralateral ovary appeared healthy. There was no peritoneal carcinomatosis or liver lesions. After evacuation of the ascitic fluid (1500 mL), serohematology, and collection for cytological analysis, a right ovariectomy was performed. The specimen was examined extemporaneously suggesting the diagnosis of benign ovarian fibrothecoma, measuring 29/21 cm, oval, homogeneous in appearance with the presence of yellowish and other brownish areas, of hard consistency. A totalization by a radical treatment (total hysterectomy, bilateral adnexitomy, omentectomy, multiple biopsies and peritoneal cytology) was done the same day since the clinical picture was very suggestive of malignancy. The postoperative course was simple, with discharge on postoperative day 3. The definitive anatomopathological diagnosis confirmed the diagnosis of fibrothecomaovarian. The total regression of hydrothorax and ascites was spectacular, one month after the intervention. With a two-year follow-up, neither hydrothorax nor ascites had reconstituted and no recurrence was noted.

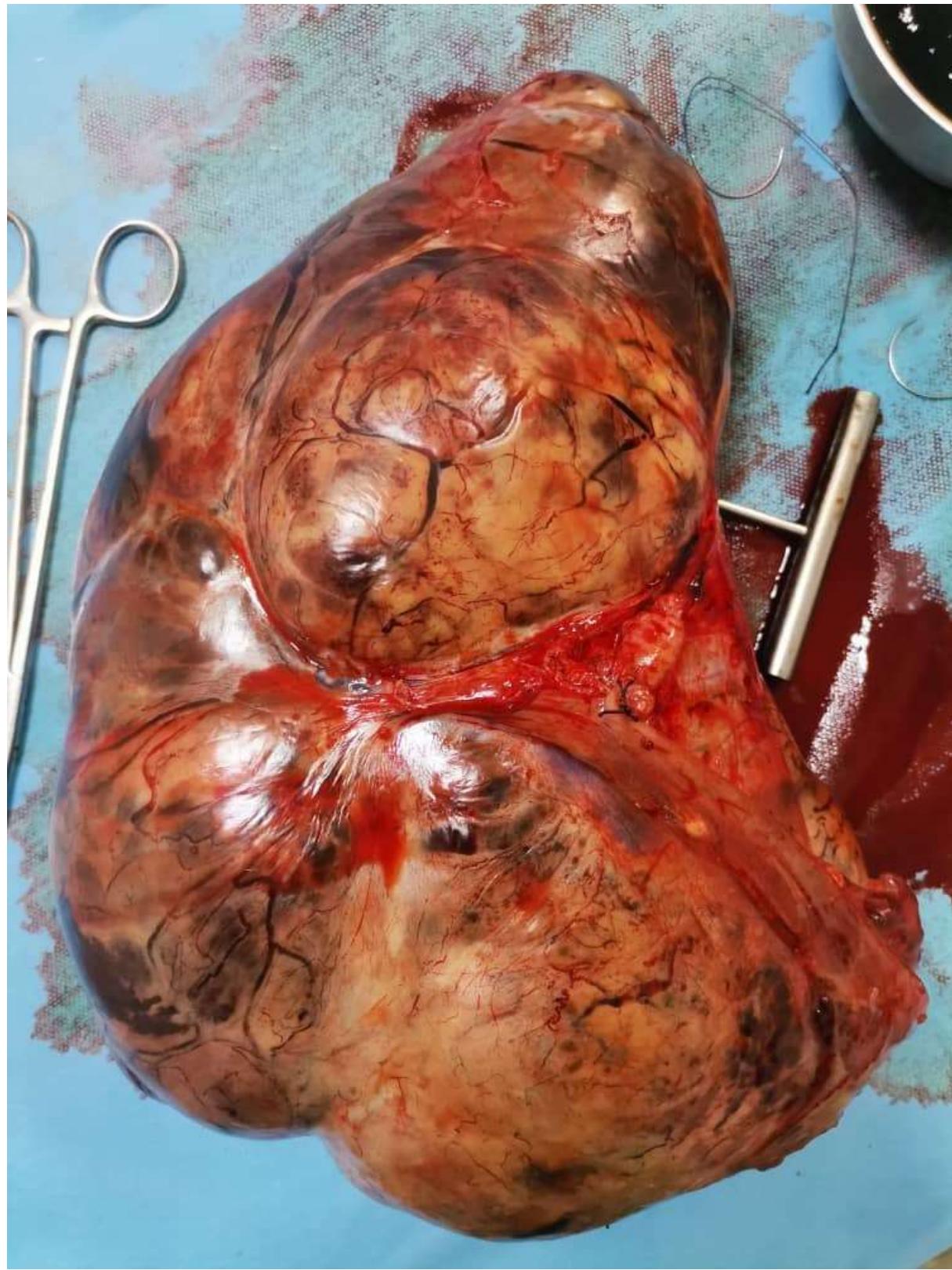


Figure 1:- the presence of a large abdominal pelvic tumor formation measuring 29\*25cm

**Observation N°2:**

A 52-year-old multiparous patient with a personal history of partial thyroidectomy who presents with chronic pelvic pain of the heaviness type associated with a progressive increase in abdominopelvic volume.

The clinical examination revealed significant ascites and a palpable abdominopelvic mass. This mass was clinically hard, mobile, measuring 15 cm right laterouterine on vaginal examination. On ultrasound, this mass appeared solidocystic, heterogeneous, multilobed, probably of ovarian origin associated with significant peritoneal effusion. A TAP CT scan was performed showing significant peritoneal effusion with bilateral pleurisy and the ovarian tumor measuring 17 cm by 11 cm. Serum CA 125 was not performed. An exploratory laparotomy was required with the exploration showing a hard, smooth tumor, developed at the expense of the right ovary, without exocystic vegetation or associated peritoneal lesions. The contralateral ovary appeared macroscopically healthy. A sample of ascites was taken for cytological analysis, a right ovarioectomy was performed, sent for extemporaneous examination suggesting the diagnosis of benign ovarian fibrothecoma, of heterogeneous appearance with the presence of whitish areas on section and a cystic component. A radical treatment consisting of total hysterectomy, bilateral adnexectomy, omentectomy, multiple biopsies and peritoneal cytology was done the same day since the appearance was very suggestive of malignancy. The postoperative course was simple. The definitive anatomopathological diagnosis confirmed the diagnosis of ovarian fibrothecoma. The regression of pleural and peritoneal effusions was total after the operation. With a three-year follow-up, no recurrence was noted.

Figure 2: - Abdominopelvic mass measuring 21\*17 cm, oval, homogeneous in appearance with the presence of whitish areas, hard in consistency, with smooth walls.





Figure 3:- the presence of a large abdominal pelvic tumor formation measuring

**Discussion:-**

Fibrothecal tumors of the ovary are rare; their frequency varies from 1 to 4.7% of organic tumors of the ovary; they are generally unilateral except when they are part of Gorlin-Goltz syndrome [5]. They occur in elderly and menopausal patients.

The circumstances of discovery are very variable, dominated by pelvic pain and metrorrhagia; these would be related to an endocrine syndrome when the tumor is hormone-secreting. In our two patients we did not note any endocrine syndromes.

Clinically, the tumor presents as a solid, hard, mobile mass with a regular surface and of very variable size with an average diameter greater than 10 cm.

Paraclinical exploration of these tumors is based on ultrasound. It allows to guide and correct diagnostic hypotheses by showing an ovarian mass, especially in cases of small tumors. In cases where the latter is equivocal, MRI would allow to establish the diagnosis of ovarian fibrothecoma in 82% of cases [8]. The most frequently encountered images are echogenic or mixed images, but anechoic images are also reported by Stephenson [6]. The ultrasound images of our two patients were echogenic or mixed.

Demons-Meigs syndrome, which combines ovarian fibroids, ascites and hydrothorax, is observed in 1 to 10% of ovarian fibroids [4]; pleural and peritoneal effusion generally regresses rapidly after surgical removal of the tumor.

The high CA125 level may be related to the amount of ascites, which is itself related to tumor size [3].

Macroscopically, the tumor is solid, yellow and firm; it is composed, microscopically, of large round cells, with moderate to abundant, pale cytoplasm, sometimes with the presence of vacuoles usually containing lipids [5].

Fibrothecomas are tumors of the sex cord stroma with histological appearances intermediate between those of fibromas and those of thecomas. In the latest classification of the World Health Organization, they are included in the class of tumors of the "thecoma-fibroma group" [5].

The treatment of these ovarian tumors is surgical [7]. The laparoscopic approach is the best approach. On exploration, these tumors most often appear suspicious, requiring an extemporaneous examination. Lumpectomy is the procedure of choice in young women, while adnexitomy, often bilateral, is justified in women in peri- or post-menopause.

Diagnostic certainty is based on histological examination, which concluded that there was a fibrothecoma in both patients.

**Conclusion:-**

Demons-Meigs syndrome, which essentially involves a large benign ovarian tumor, ascites and pleural effusion, still has an obscure etiology and pathophysiology. The only criterion of the syndrome remains the quality of the prognosis, namely its benignity and the definitive cure of the patient and the disappearance of all signs after surgical intervention.

**References:-**

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