

## MEIGS' SYNDROME IN A 63-YEAR-OLD WOMAN – CASE REPORT

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**Abstract:** *The authors report the case of a 63-year-old female patient admitted with metrorrhagia, abdominal distention, and a recent history of minor shortness of breath. Pulmonary clinical examination showed all the signs of right pleural effusion, which was also confirmed by the chest X-ray. Surgical intervention was decided and the laparotomy confirmed a large pelvic mass which was part of the left ovary, 100 ml of ascitic fluid and a polyfibromatous uterus. The ovarian mass was removed and also a hysterectomy with bilateral adnexectomy was performed. The absence of malignancy was confirmed. Even though Meigs' syndrome mimics an aggressive malignant ovarian tumour, in the presence of pleural and peritoneal effusions, after surgical removal of the tumour the patient has a good prognosis.*

**Key words:** *Meigs' syndrome, Ovarian tumour, Pleural effusion, Ascites.*

### 1. Introduction

Meigs' syndrome is defined as the presence of a benign ovarian tumour, most commonly a fibroma, in association with ascites and hydrothorax. The characteristic feature of this condition is the resolution of these effusions once the tumour is surgically removed [4].

The syndrome is named after Joe Vincent Meigs (1892–1963), Professor of Gynaecology at Harvard Medical School. Although it was described by several authors in the 19th and the beginning of 20th centuries there were Meigs and Cass who brought out the importance of the syndrome [2, 3].

The histological features of a fibroma is found in about 2-5% of all ovarian tumours, but only 1% of these meet the

features of the Meigs' syndrome [6], [8].

Even though Meigs' syndrome mimics an aggressive malignant ovarian tumour, given the presence of pleural and peritoneal effusions, after surgical removal of the tumour the patient has a good prognosis and the life expectancy is similar to healthy normal population [5], [7].

The etiology of the pleural and peritoneal effusions is not clearly understood. Most authors consider that the main cause may be the perturbation of lymphatic drainage by the large mass or the production of vascular endothelial growth factor and fibroblast growth factor by the tumor, which leads to increased local capillary permeability [1].

The clinical presentation, although frequently scarce, is usually related to the pleural effusion and ascites. Therefore, the

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symptomatology includes abdominal discomfort, dyspnoea and, sometimes, fatigue. Physical examination may reveal a palpable tumour in the pelvis.

## 2. Case Presentation

We present the case of a 63-year-old

female patient admitted to the Surgery Clinic with metrorrhagia, abdominal distention, and a recent history of minor shortness of breath.

Pulmonary clinical examination showed all the signs of right pleural effusion, which was also confirmed by the chest X-ray (Figure 1).



Fig. 1. *Preoperative chest X-ray – right pleural effusion*

The abdominal examination revealed a round irregular mass arising from the right pelvic cavity. Abdominal ultrasound showed a large pelvic mass (23 cm in diameter) more on the right pelvic cavity, a polyfibromatous uterus, and a small quantity of ascites.

A complete blood count was carried out, with normal results.

Surgical intervention was decided and the laparotomy confirmed a large pelvic mass which was part of the left ovary, dislodged in the right side of the peritoneal

cavity.

Also, 100 ml of ascitic fluid and a polyfibromatous uterus were found. The ovarian mass was removed and also a hysterectomy with bilateral adnexectomy was performed. The macroscopic appearance: giant polynodular tumoral mass (23 cm in diameter), with compact structure, microcysts, and haemorrhagic areas. No residual ovarian tissue was observed in the subcapsular portion of the tumour. (Figure 2)



Fig. 2. *Macroscopic appearance of the tumor (left) and the uterus with adnexa (right).*

Microscopically, a compact tissue, consisting of pleomorphic fusiform cells, and discrete mitotic activity (less than 3 divisions/10 fields) was described. The cells were arranged in fascicles, with hyaline and myxomatous areas. Dilated vessels with thrombotic material were noted.

The absence of malignancy of the tumour and of the ascitic and pleural

effusions was confirmed by cytomorphologic study. In conclusion, the histopathological examination demonstrated an ovarian tumour with a fibroma aspect.

Postoperative evolution was favourable and the patient was discharged after 12 days. The control chest X-ray revealed the resolution of the hydrothorax. (Figure 3).

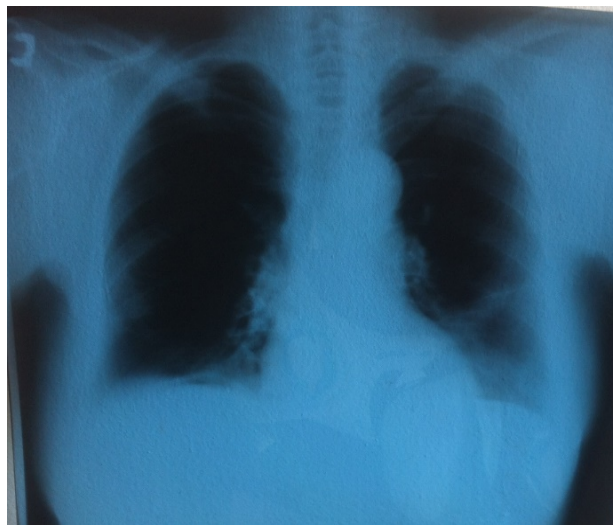


Fig. 3. *Postoperative control chest X-ray- resolution of the right hydrothorax*

### 3. Conclusions

Even though Meigs' syndrome mimics an aggressive malignant ovarian tumour, in the presence of pleural and peritoneal effusions, after surgical removal of the tumour the patient has a good prognosis and the life expectancy is similar to normal healthy population, even if recurrence was also reported.

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