# Meigs' syndrome

## *A case report*

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CASE REPORT

A 38 year old African woman was admitted with a history of abdominal swelling of two months duration. She also complained of general malaise, weight loss and increasing dyspnoea. She had experienced generalised lower abdominal pain and noticed a change in her bowel habits over the same period of time. Examination revealed an emaciated patient who was dyspnoeic at rest. Her abdomen was tense and tender due to the ascites. There was no rebound or guarding. In addition, there was a large, irregular firm mass arising from the pelvis which was ballottable. On pelvic examination the uterus was normal in size and the mass which corresponded in size to a gestational period of 24 weeks was thought to arise from the right adnexaes. She also had bilateral pleural effusions confirmed radiologically (Fig. 1). A differential diagnosis of ovarian carcinoma or fibromyomata was entertained. Specimens of straw coloured pleural and ascitic taps revealed no malignant cells. The fluid was a transudate which contained polymorphs, histiocytes, mesothial cells and lymphocytes. An intravenous pyelogram demonstrated pressure effects on the lower third of the left ureter due to the presence of an intrapelvic mass. A barium enema showed no specific pathology.

Despite drainage of the pleural and ascitic fluid, the patient's condition did not improve. She had poor lung function tests, an FVC of 1.3 $\ell$ (3.0) and an $FeV_1$ of 1.1 $\ell$ (2.6) and therefore presented a poor anaesthetic risk. At this stage a decision was taken to discharge her as a Stage IV carcinoma of the ovary because of the reluctance of the anaesthetist to provide general anaesthesia in the absence of an intensive care unit "bed". However, the lack of a tissue diagnosis was worrisome and consequently tru-cut biopsy of the abdominal mass was performed under local anaesthesia. The histology was consistent with an ovarian fibroma. In view of the histological findings, Meigs's syndrome was diagnosed. A laparotomy was performed revealing a large 20x20 cm solid right ovarian tumour which had undergone torsion. The left ovary and uterus were normal. Apart from approximately three litres of ascitic fluid there was no other pathology.

The patient had refused a hysterectomy and a right salpingo-oophorectomy was performed. Postoperatively there was spontaneous resolution of the pleural effusions (Fig. 2) and ascitic fluid did not reaccumulate. Histology confirmed an

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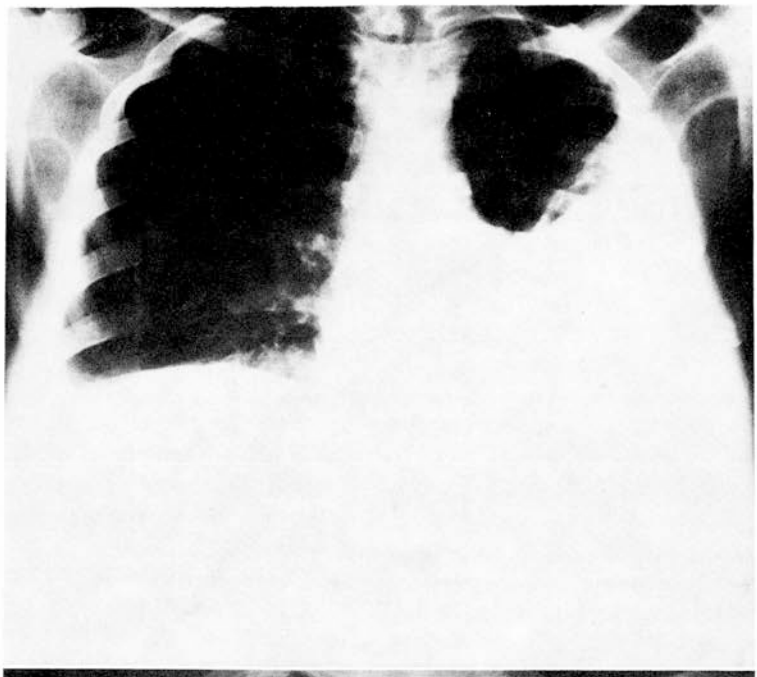

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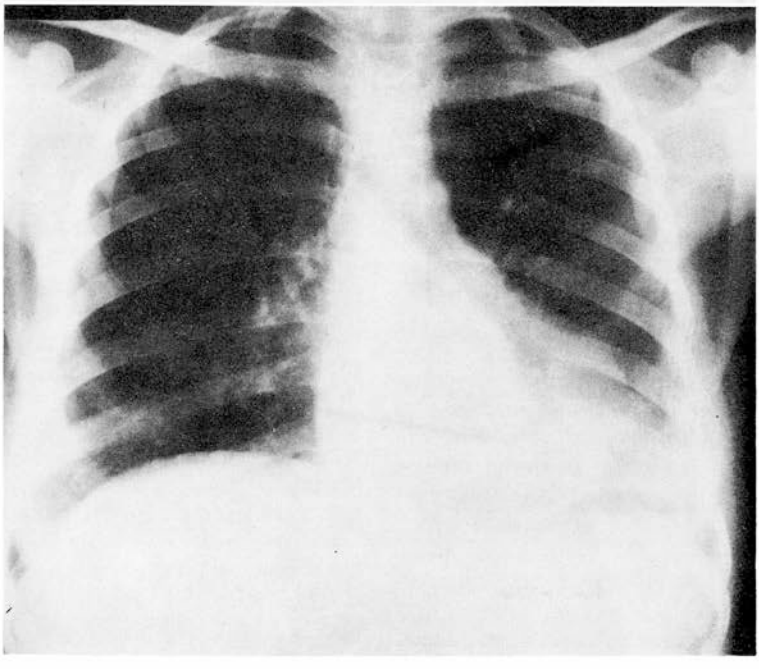

Fig. 1. — Chest X-ray demonstrating pleural effusion prior to surgery.
Fig. 2. — Chest X-ray demonstrating clearance of pleural fluid following surgery.

ovarian fibroma with focal areas of necrosis and oedematous adjacent ovarian tissue.

## DISCUSSION

Meigs' syndrome occurs in less than 5% of all fibromas [1] and fibromas themselves constitute less than 5% of all ovarian tumours [2]. Thus Meigs' syndrome, the classical triad of ovarian fibroma, ascites and hydrothorax could be said to be rare and in the literature surveyed no incidence is quoted [3, 4, 5]. In 1937, Meigs' and Cass reported 4 cases of benign ovarian fibroma with associated ascites and pleural effusion [6]; complete cure without recurrence followed on removal of the tumour. There have been 4 case reports of Meigs' syndrome in recent literature [7, 8, 9], one of which was associated with elevated CA 125.

Ovarian neoplasms are usually "silent tumours". In the early stages of their growth they may be symptomless and even when they are symptomatic only vague gastrointestinal complaints are common. Because ovarian neoplasms grow quietly and painlessly, any abdominal enlargement requires that the physician exclude an ovarian neoplasm.

Physical findings can also be absent until the later stages of tumour growth. Any pelvic mass of greater than 5 cm in a woman should be considered suspect and depending on the size of the mass ultrasound or laparotomy should be used for evaluation and diagnosis. Although ascites and pleural effusions usually suggest a malignancy with metastatic lesions, they can also occur with benign tumours. It is therefore essential to obtain tissue for histological examination prior to making a final diagnosis. This point is clearly illustrated by this case report. The clinical picture of the patient, while fitting that of Meigs' syndrome also matched that of a patients with advanced ovarian carcinoma. She was emaciated, had a solid tumour with ascites and an hydrothorax.

The only practical step possible was that of the controversial procedure of tru-cut biopsy. The importance of tissue diagnosis for all pelvic masses is further stressed as resection of the tumour in Meigs' syndrome is curative. This is in great contrast to the outcome of a Stage IV carcinoma of the ovary.

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