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### Pseudo-Meigs Syndrome: A Case Report

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#### Abstract

Meigs syndrome is defined as the co-existence of hydrothorax and ascites with solid benign ovarian tumours, which resolve on removal of the tumour. Hydrothorax and ascites associated with pelvic tumours other than described in Meig's syndrome is called Pseudo-Meig's syndrome.

A 45 years old woman presented with abdominal distention and discomfort for one year and breathlessness for one month. Clinical examination and investigations showed hydrothorax, ascites and a large pelvic tumour palpable abdominally, another mass palpable per vaginally. Thoracocentesis and abdominal paracentesis done for symptomatic relief. Exploratory laparotomy done. Total hysterectomy and bilateral salpingo-oopherectomy done.

Histo pathological examination of the mass confirmed it as an ovarian, serous, borderline tumour. The immediate postoperative resolution of hydrothorax and ascites confirmed the diagnosis of Pseudo-Meigs syndrome.

Keywords: Ascites, hydrothorax, Meigs syndrome, Pseudo-Meigs syndrome.

#### Introduction

The coexistence of pelvic tumour, hydrothorax and ascites has been known since the late 19<sup>th</sup> century. The features of the disease were described by Meigs and Cass in 1937. Rhoads named it -Meigs syndrome. Today, Meigs syndrome is defined as the coexistence of hydrothorax and ascites with solid ovarian tumour and surgical resection of the tumour resulting in spontaneous resolution of hydrothorax and ascites. Histologically the tumours are Fibroma, Thecoma, Cystadenoma or Granulosa cell tumour. Pseudo-Meigs syndrome is characterized by the coexistence of hydrothorax, ascites and ovarian or pelvic tumours, benign, malignant or metastatic. Both theses syndromes should be considered in otherwise healthy postmenopausal women, who present with either new or recurrent hydrothorax and ascites.

### **Case Report**

A 45 years old woman was admitted in the Department of Obstetrics & Gynaecology, Vinayaka Mission's Medical College and Hospital with the complaints of abdominal distension since one year, pain in lower abdomen since six months, weight loss and reduced appetite from six months and breathlessness for one month.

The clinical examination revealed sinus tachycardia, tachypnoea, reduced chest movements and diminished breath sounds A well defined mass of 15x18 cm size arising from pelvis, palpable abdominally, two finger breadths above umbilicus, with undulating surface, non tender, mobile, firm in consistency; On per vaginal examination, another mass palpable in the pelvis, about 10-12 weeks size, non tender, mostly in the posterior fornix, pushing the uterus anteriorly and upwards. Moderate ascites present. No lymphadenopathy.

#### **On investigations**

X RAY chest showed bilateral pleural effusion, significant on right side and minimal on left side.



CT scan shows multiseptated, multiloculated enhancing large mass lesion in the lower abdomen, of size 15x9.5x11.3 cm(MLxAPxSI); Another mass in pouch of douglas measuring 9x10.5x10.4 cm(MLxAPxSI) from ovary; confirmed the ascites

Tumour markers were within normal range.

A preoperative paracentesis and drainage of pleural effusion was necessary to relieve dyspnoea. The cytologic examination of the fluid was negative for malignant cells.

Exploratory laparotomy done. Straw coloured ascitic fluid moderate amount. No peritoneal, omental or bowel seedlings. No obvious lymph node involvement. Stomach normal. Appendix normal. Liver and spleen normal. Left ovarian mass 16,12,10 cms, no adhesions, capsule intact, partly cystic, partly solid, not haemorrhagic. Right ovary is 11,10,10 cms, not adherent, capsule intact. Total hysterectomy, bilateral salpingo-oopherectomy done. Cut section of both masses is –mostly cystic with multi loculations, partly solid, with no papillary projections.





Histopathological examination shows serous borderline tumour. There was complete resolution of hydrothorax and ascites after tumour removal. Follow up done after 1,3,6,12 months- there was no recurrence of tumours or fluids.

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### Discussion

Ovarian fibroma is associated with ascites in 10-15% of cases and associated with hydrothorax also in 2% cases. The interesting combination of ovarian fibroma, ascites and hydrothorax is called Meigs syndrome, although Meigs himself pointed out that he only emphasised what had been described previously by Demons of France and Lawson Tait of England.

The origin of fluid is not clearly known. It may be-peritoneal exudates caused by irritation of the tumour; due to degeneration occurring within the tumour mass; the result of changes in the vascularity of the tumour; active secretion of different chemical mediators by the tumour. The same pathogenesis happens in mobile ovarian or pelvic tumours other than fibroma in Pseudo-Meigs Syndrome.

The hydrothorax can be bilateral but is mostly right sided, because the ascitic fluid tracks through a defect in the diaphragm, such defects also being more common on right side. Another fact, however, supported by anatomical knowledge and experiments with radioactive isotopes, is that the transfer of fluid from the peritoneal to pleural cavity is by way of various lymphatic channels.

Removal of fibroma is always followed by spontaneous cure of the hydrothorax and by the disappearance of pyrexia which is mostly present with these type of tumours. According to purists the criteria for diagnosis of Meigs syndrome are that the tumour must be ovarian, solid and benign; both hydrothorax and ascites must be present; and removal of tumour must result in their spontaneous and permanent cure.

A Pseudo-Meigs syndrome is associated with benign, malignant or metastatic tumours arising from ovary, other pelvis organs or even from extrapelvic organs. Lung metastasis of other malignant tumours may produce hydrothorax. Similar clinical picture may be seen ovarian hyperstimulation with gonadotrophins.

### Conclusion

Pseudo-Meigs syndrome is a rare entity. The management is symptomatic relief, explorative laparotomy, definitive surgery. After surgery, further management and prognosis depends on the type of the tumour.

### Conflict of interest: Nil

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