An 18-year-old with Meigs Syndrome with bilateral ovarian tumors
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**INTRODUCTION**

Meigs syndrome is a condition that presents with a triad of benign ovarian tumor with ascites and pleural effusion. Normally, this ovarian tumor is an ovarian fibroma in an older patient, but extremely rare cases have been reported in younger patients with sclerosing stromal tumor.

**CASE DESCRIPTION**

An 18 y/o female presented to the ED with:
- Worsening shortness of breath, especially with exertion over the past two weeks
- Nonproductive cough for the past two days

She denied fevers, chills, night sweats, weight loss, chest pain.

**Past Medical History:**
- Medulloblastoma as an infant complicated by hydrocephalus, requiring cerebellar resection and craniospinal radiation and chemotherapy in remission
- Not taking any medications

**Social History:**
- No history of travel or recent sick contacts.
- No alcohol, tobacco or drug use

**Family History:**
- Maternal grandmother diagnosed with ovarian cancer at an older age

**Physical Exam:**
Vital Signs:
- BP: 103/79
- Pulse: 109
- Temp: 37°C (98.6°F)
- Resp: 18
- SpO2: 95%

Heart: regular rate and rhythm, no murmurs
Lungs: no breath sounds over the right hemithorax and slightly decreased breath sounds over the left hemithorax

**Labs:**
- CBC showed WBC 10.62, unremarkable LFTs, BMP, BNP 6.
- Serum protein: 8.3, serum LDH: 142
- Urinalysis unremarkable. Urine HCG negative.

**Chest x-ray:**

Pleural fluid showed an *exudative process*

**CT abdomen and pelvis:**

**CA-125: 842 U/mL (0 to 46 U/mL)**

Exploratory laparotomy with bilateral salpingo-oophorectomy was performed by the OB/GYN service and bilateral ovarian masses were identified as sclerosing stromal tumors on post-operative pathology.

She was discharged home and her pleural effusion and ascites resolved.

**DISCUSSION**

Meigs syndrome is rare affecting about 1% of women who have ovarian tumors. It is rarer in younger patients. Some risk factors include enlarged ovarian mass, co-existing pleural effusion and previous family history of cancer. Of the types of ovarian tumors to be found with Meigs syndrome, fibromas are the most common. CA-125 levels can be elevated in non-malignant cases likely due to ovarian metaplasia.

**Learning points:**
- Consider Meigs syndrome in patients presenting with an exudative pleural effusion and ascites, especially with a family history of cancer
- Non-malignant intra-abdominal lesions can cause an elevation in CA-125
- While usually described in the setting of ovarian fibromas, other ovarian pathology is also associated with Meigs syndrome