A postmenopausal women with bilateral pleural effusion and ascites: a case report of Meigs’ syndrome.

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Introduction

Meigs’ syndrome is defined as the triad of benign ovarian tumor with ascites and pleural effusion that resolves after resection of the tumor. The ovarian tumor in Meigs’ syndrome is a fibroma [1]. After primary survey, mimics a malignant condition such as pelvic tumor, ascites, pleural effusion and elevated serum Carbohydrate Antigen-125 (CA-125) will be noted. But it is a benign disease with very good prognosis if properly managed. these tumor may be accompanied by being ascites and pleural effusion [2]. With this case report we would like to emphasize that the clinical presentation of an ovarian tumor might be ovarian cancer, but can masquerade as something uncommon like Meigs’ syndrome.

Case Report

The 78 year-old woman with past history of hypertension, suffered from dyspnea, productive cough and abdominal fullness for a half month. Constipation, poor appetite and chest tightness were also noted. There was no fever, no abdominal pain, no dysuria, no BW loss noted. She was brought to our ER due to dyspnea. At ER, CXR showed bil. pleural effusion (more on the right side). Pigtail drainage of right pleural effusion was done and was sent for analysis. Lab data showed total protein in pleural effusion/ serum total protein > 0.5, exudate. Other lab data showed elevated WBC with left shift, NaK: 143/3.16, BUN/Cr: 29.2/1.16. She was then admitted under the impression of bil. Pleural effusion, exudate at right side.

Cytologic and Histologic Findings

Figure 3: Cytology of the pleural effusion is shown to be abundant mesothelial cells. (Papaniclaou stain, X100)

Figure 4: Cytology of the pleural effusion is shown to be abundant reactive mesothelial cells and lymphocytes. (Papaniclaou stain, X400)

Figure 5: This case of ascites, cytology showed negative for malignant cells. Mesothelial cells present. (Papaniclaou stain, X100)

Figure 6: Cytology of the ascites is shown to a population of moderately enlarged mesothelial cells. (Papaniclaou stain, X400)

Figure 7: The ovary reveals a picture of fibroma composed of spindle-shaped cells with bland oval nuclei and scant cytoplasm. The tumor cells are arranged in intersecting bundles admixed with collagen. The cellularity is not evidently increased. The mitosis is barely found. Focal areas of degenerative change with hemorrhage, edema and myxomatous change are noted in the tumor. (A)HE stain, X100; (B)HE stain, X400.

Discussion

In 1934, Salmon described the association of pleural effusion with benign pelvic tumors. It was not until the report by Meigs and Cass in 1937 that widespread attention of the medical profession was drawn to the significance of pleural effusion and ascites in benign ovarian fibroma [3]. The pathophysiology of ascites and pleural effusion in Meigs’ syndrome have not been elucidated yet.

The purpose of this case report is to remind clinicians to consider Meigs’ syndrome as a differential diagnosis of vague chief complaints of fatigue, nonproductive cough, shortness of breath, abdominal bloating or weight loss. Clinical presentation of postmenopausal women with solid adnexal masses, ascites, and pleural effusion is highly suspicious for malignant ovarian cancer. However, Meigs’ syndrome should be ruled out as it can present with the exact same symptoms. When menopausal women find that the cause of ascites and pleural effusion is unknown, it is necessary to consider whether there is Meigs’ syndrome to treat the surgery as soon as possible, to reduce the patient’s chest tightness, abdominal distension and other uncomfortable symptoms.

Reference