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Case Report

Struma ovarii : Rare presentation with pseudo-Meigs syndrome and elevated CA 125

Minocha Bharti, Agarwal Shivani, Dewan Rupali , Batra Achla

Department of Obstetrics and Gynecology VMMC and Safdarjang Hospital, New Delhi - 110029.

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Introduction

The presence of a pelvic mass with suspicious clinical features and elevated CA 125 may be suggestive of gynecological malignancy. Large ascites with hydrothorax is usually associated with benign fibroma or thecoma (Meigs syndrome) and completely resolves after surgery. Pseudo-Meigs syndrome refers to the same features associated with other ovarian or gynecological tumors. Struma ovarii may be present with ascites but it is extremely rare for it to present with pseudo-Meigs syndrome and elevated CA 125 levels.

Case report

A 52 year old para 4 menopausal woman was admitted on 4th June, 2004 for gradually enlarging abdominal girth since 4-5 months and shortness of breath. On examination she was found to have ascites, a large right pleural effusion with collapsed lung and an irregular right adenexal mass of approximately 10 x 8 cm size. Pelvic ultrasound revealed a mass with solid and cystic areas, normal endometrium, and undetected ovaries. She had an ascitic fluid examination done elsewhere before admission which showed that it was exudative, lymphocytic and free of malignant cells or acid fast bacilli (AFB). CT showed well defined heterogeneous, enhancing, mass of 9 x 7 cm with areas of necrosis in right adenexal region, ascites, right pleural effusion and absence of lymph node enlargement (Figures 1,2,3). Liver function tests, intravenous pyelograms and barium examination, were all within normal limits. The CA 125 level was elevated at 849.510 iu/mL (normal < 35 iu/mL). Pleural fluid drained on many occasions to relieve breathlessness was found negative for AFB and

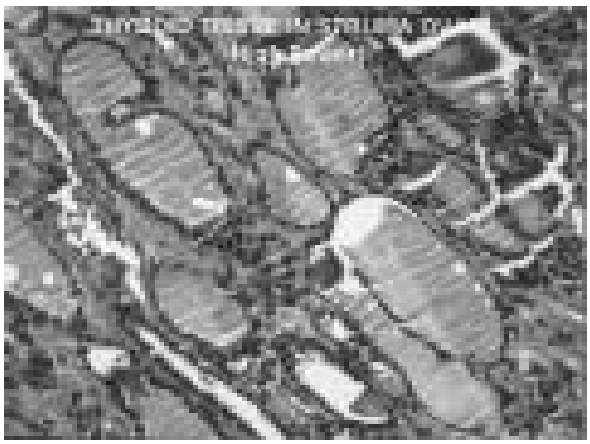

Figure 1. Contrast CT pelvis showing enhancing right adenexal mass with solid and cystic areas, ascites and absence of lymph nodes.

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Correspondence :
Dr. Shivani Agarwal
YZ-25 Sarojini Nagar,
New Delhi - 110 023.
Tel. 011-24107702 Email : nkgupta@pmo.nic.in

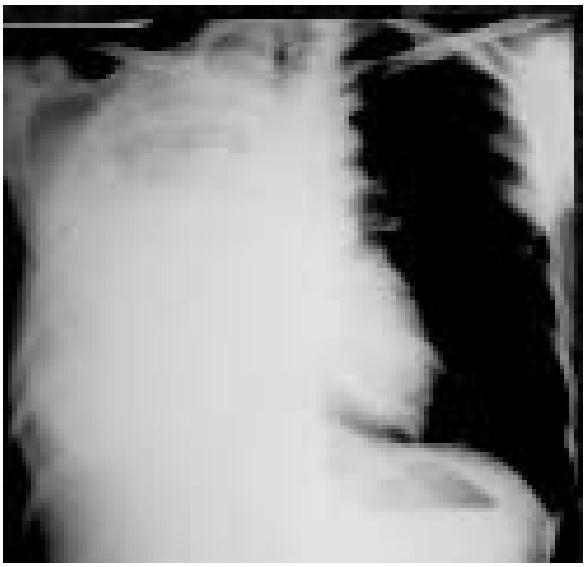

Figure 2. Shows Mamography.

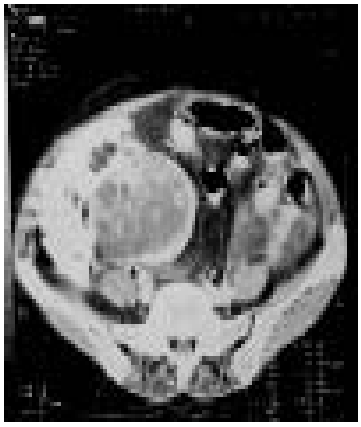

Figure 3. Shows Lynph node enlargement.

malignant cells. Pleural fluid was drained one day prior to surgery. A laparotomy was performed on 14th July, 2004 under general anesthesia. A 10 x 9 x 3.5 cm multilocular right ovarian cyst with areas of hemorrhage was seen. Peritoneal washings, infracolic omentectomy, total abdominal hysterectomy, bilateral salpingo-oophorectomy and selective lymph node sampling were done. Postoperative recovery was uneventful. Histopathology revealed pure struma ovarii of the right ovary with no other germ cell elements present. There was no evidence of malignancy in any of the specimens and she was discharged on 11th August, 2004. Serum CA 125 level decreased to 500 iu/mL three days after the surgery and returned to normal after one week. Thyroid function tests performed after surgery were within normal limits.

Discussion

Mature cystic teratomas account for approximately 20% of all ovarian tumors. Struma ovarii is a monodermal variant, which predominantly contains thyroid tissue (greater than 50%). It constitutes about 2.7% of all ovarian teratomas, with an incidence of 0.1-0.3%. Usually seen in 5th and 6th decades of life, it is seldom diagnosed before an exploratory laparotomy for a pelvic mass the most common presenting symptom [1]. Less than a third develop ascites and cases of struma ovarii causing pseudo-Meigs syndrome have been rarely reported [2].

With the exception of endometriosis, benign conditions rarely cause marked elevation of CA 125. An elevated CA 125 level in postmenopausal woman with a pelvic mass has 90% chance of being malignant [3]. Our patient had a number of unusual features. She presented with rapidly increasing ascites and exudative lymphocytic pleural effusion, which is usually identified with tuberculosis. Ultrasound finding of solid and cystic irregular adenexal mass in a postmenopausal woman with elevated CA 125 raises the expectations of malignancy. Further, Leving and Hammand [4] found that the combination of struma ovarii and elevated CA 125 is rare. Despite having a pelvic tumor she did not have any pelvic symptoms and the underlying cause of her ascites and pleural effusion was discovered fortuitously. Surgical excision of the tumor resulted in immediate and rapid resolution of symptoms, pleural effusion and CA 125 levels [4]. Struma ovarii is a benign tumor, which may manifest in different ways and may show clinical, ultrasonographic, and biochemical signs suggestive of malignancy.

Reference

1. Makhani S, Kim W, Gaba AR. Struma ovarii with a focus of papillary thyroid cancer: a case report and review of the literature. Gynecol Oncol 2004;94:835-9.
2. Bethure M, Quiun M, Rome R. Struma ovarii presenting as acute pseudo-Meigs syndrome with an elevated CA 125 level. Aust NZJ Obstet Gynaecol 1996;36:372-3.
3. Doed JR, Quinn MA, Rome R et al. Women with a pelvic mass - when to perform an ultrasound. Aust NZJ Obstet Gynaecol 1993;33:404-7.
4. Leung YC. Hammond IG. Limitations of CA-125 in the preoperative evaluation of a pelvic mass: struma ovarii and ascites. Aust NZJ Obstet Gynaecol 1993;33:216-7.