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STRUMA OVARII - ASSOCIATION WITH PSEUDOMEIGS AND RAISED CA - 125 LEVELS - A RARE CASE REPORT

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Abstract :
Struma ovarii has elicited considerable interest because of itsunique features . 30 yr old nulliparous female presented with mass abdomen , ascites and pleural effusion which on further evaluation found to be strumaovarii , with raised CA - 125 levels . Leftsalpingoovariotomy-done and wedge biopsy was taken . There was complete remission of ascites and pleural effusion following tumour removal . It is avery raretumour associated with Pseudomeig s syndrome and elevation of CA 125 . So far only 9 cases has been reported in medline research .
Keyword : Struma ovarii , CA - 125 carcinoma antigen

CASE SUMMARY :30yr old nulliparous female presented to gynaec OPD with c/ o abdominal distension ,abdominal pain , loss of appetite and weight loss for one month duration , with no menstrual complaints . O /E she was moderately nourished , not icteric , no lymphadenopathy ,a firm mass was felt in the lower abdomen with gross ascites .P / V : vagina was admitting one finger , cervix was smooth , uterus was normal with fullness in the left fornix . P /R : both the parametriumwas free . USG abdomen and pelvis showed a heterogenous multiloculated mass from the left adnexa measuring 12.5 x10.5 x 9 cm .Uterus was normal size , right adnexa was normal with moderate ascites . Ascitic and pleural fluid cytology was negative for malignant cells .Thoracoabdominal CT scan showed marked bilateral pleural effusion with moderate ascites ,heterogenous mass from the left ovary . CA -125 levels> 1000 U / ml. Sputum AFB was negative . Exploratory laparotomy was done . Under spinal anaesthesia lower midline incision was made , Per operative findings include 2.5 litres of straw coloured ascitic fluid , left ovary was replaced by a 20 x 15 x 12 cm solid tumour ,freely mobile with no external excrescences , uterus and right ovary was normal

paracolic gutter , omentum ,undersurface of liver and para aortic area was free . Left salpingoovariotomy done , wedge biopsy was taken from the right ovary . HPE report showed strumaovarii . Post operative period was uneventful , and post operative thyroid function tests were within normal limits , CA -125 levels 2 weeks later were< 400 U / ml Patient had regular monthly follow up for 9 months and there was no recurrence .

DISCUSSION : Mature cystic teratomas account for approximately 20% of all ovarian tumors. Of these, approximately 15% contain normal thyroid tissue. Struma ovarii is a monodermal variant of ovarian teratoma, which predominantly contains thyroid tissue (greater than 50%) and was first described by Boetlin in 1889 . It constitutes about 2.7% of ovarian teratomas. It is usually a benign condition although occasionally, malignant transformation is observed. Preoperative clinical diagnosis of strumaovarii, however, is very difficult. The peak age incidence of struma is in the fifth decade , but cases have been reported in older post-menopausal women and uncommonly occurs in pre-pubertal girls. In addition to the usual signs and symptoms of a pelvic mass, ascites occurs in one-third of cases, and occasional patients have Meigs' syndrome. The ascitic and pleural fluid in Meigs' and pseudo-Meigs' syndrome are usually serous, but may be serosanguinous. The origin of the effusions remains obscure, although some mechanisms have been suggested such as active fluid secretion by the tumor or peritoneum, venous and/or lymphatic obstruction, low serum protein and inflammatory products . In the literature, very few reports have been published on strumaovarii associated to ascites and elevated CA125 . Clinical evidence of hyperthyroidism occurs in about 5% of cases. Thyrotoxic crisis is a rare, but life threatening complication following excision of struma in which hyperthyroidism was not diagnosed preoperatively . The elevation of CA 125 may have been secondary to the presence of ascites , however its level was much higher than that typically seen with ascites of benign origin. An ovarian mass with ascites and elevated serum CA 125 level , in a woman generally suggest a malignancy process. So the present case with the clinical findings of ascites, hydrothorax, markedly elevated serum CA 125 and a large complex pelvic mass in a woman strongly suggest pelvic malignancy before operation. But complete remission of the ascites, hydrothorax, and CA125 was obtained after surgery without any adjuvant therapy . Malignant change seems to occur in about a third of cases .Metastatic spread, which follows the pattern of ovarian cancer, occurs in approximately 5% of malignant cases.

CONCLUSION : strumaovarii is a rare monodermal teratoma arising in the ovary . The correct preoperative diagnosis is seldom made . The possibility of strumaovarii however should be raised when a solid and cystic teratoma-like ovarian tumour shows a well-vascularized solid component on colour Doppler ultrasound .This report emphasizes that there are benign gynaecological conditions which might simulate malignancy . Current controversies revolve around the diagnosis of malignancy, ie, whether to classify the struma using ovarian or thyroid carcinoma criteria.

Because strumaovarii is extremely uncommon, there is no consensus on treatment. Each case must be managed individually

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