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A rare case of malignant mixed mullerian tumour of the fallopian tube

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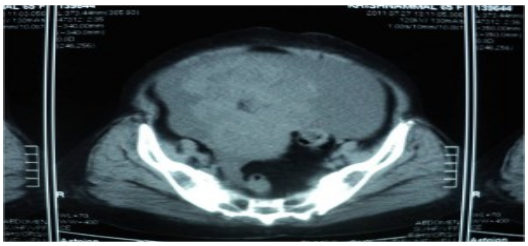
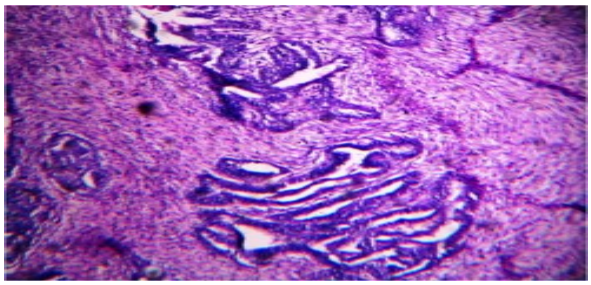
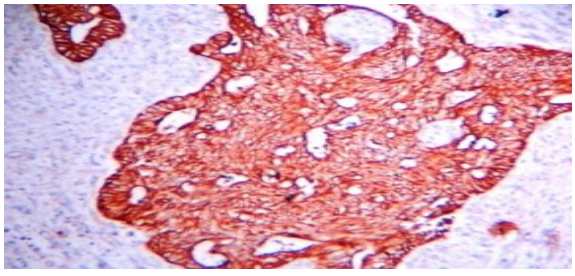
Abstract : A 65 year old post-menopausal woman, P8L8A2, with complaints of lower abdominal pain and distension for 2 months no history of white discharge or bleeding pv. After proper blood investigations and imaging studies, laparotomy and histopathological analysis along with immuno histochemistry staining revealed a primary malignant mixed mullerian tumor of the fallopian tube which is extremely rare with poor prognosis. So far only 55 cases have been reported worldwide. It shows both malignant epithelial and mesenchymal elements.



Keyword : Mixed mullerian tumor, Primary malignant fallopian tube cancer **A** 65 year old postmenopausal woman with P8L8A2 presented to the OPD with complaints of lower abdominal pain and distension for 2 months. She had no history of white discharge or bleeding per vaginum. She did not have any significant past history or family history. On examination, the entire abdomen was distended with gross ascites. A vague mass in the lower abdomen more towards the left side with a size of 16 weeks gravid uterus was identified. On per vaginal examination, cervix was smooth and flushed with the vault. The uterus size could not be made out, there was fullness present in the right and anterior fornix. No abnormality was detected in per rectal examination. USG showed a solid pelvic mass of size 8.5*9 cm along with massive ascites. CT abdomen and pelvis showed a solid mass of 9 x 6 x 6 cm from the pelvis extending into the lower abdomen displacing bowel loops. The uterus and ovaries were not made out separately. Gross ascites was reported.
Ascitic fluid analysis showed reactive effusion negative for malignant cells. Staging laparotomy showed 2 to 3 liters of haemorrhagic ascitic fluid, a solid friable mass arising from the left fallopian tube of size 15 x 12 cm twisted as a whole with one of its end attached to the uterus and dome of bladder. The uterus both ovaries and right fallopian tube were normal. The paracolic gutter, paraaortic area, omentum, bowel loops were free, the under surface of the liver was pale and grey but there was no nodularity. The tumour was staged Ic. Total abdominal hysterectomy with bilateral salphingo oopherectomy and infracolic omentectomy was done



Histopathological examination showed carcinosarcoma of the fallopian tube; the tumor consisted of biphasic population of epithelial & mesenchymal components



Immunohistochemistry showed that cytokeratin & vimentin positivity.
The patient received six cycles of chemotherapy with cisplatin and is currently in remission. **Discussion:** Fallopian tube cancers are extremely rare, accounting for about 0.3% of all female genital tract malignancies occurring around the fifth and sixth decade of life. Women with BRCA 1 and BRCA 2 are at higher risk. The classical triad is pelvic pain, pelvic mass and prominent watery vaginal discharge (hydrops tubae profluens 15%). Vaginal bleeding or discharge is the most common symptom (50%). Transcoelomic spread occurs in 80% of cases. Lymphatic spread is mainly through the paraaortic and pelvic nodes.
Figo's surgical staging shows: Stage 1: confined to tubes (20-25%), Stage 2: Confined to pelvis (20- 25%), Stage 3: extra pelvic spread (40-50%) and Stage 4 is distant spread (5-10%). The histopathologic variants are adenocarcinoma, endometrioid adeno carcinoma, squamous cell carcinoma, clear cell carcinoma, trans itional cell carcinoma and mucinous carcinoma. The histogenesis is from stem cells by a multistep process of differentiation. Ultrasound shows a sausage shaped mass with growths inside the fluid filled center of the tube giving a 'cogwheel' appearance which is typical of fallopian tube carcinoma. The gold standard in diagnosis is immunohistochemistry staining with cytokeratin, vimentin, smooth muscle actin, desmin and Ki67. Sarcomatous elements are strongly positive for SMA and Vimentin, carcinomatous elements are strongly positive for cytokeratin. The management is surgery and chemotherapy (platinum and taxane).Staging laparotomy includes sampling of the pelvic fluid, pelvic and abdominal washings, transabdominal hysterectomy and bilateral salphingo oopherectomy, omentectomy lymphadenectomy and selective biopsies of the peritoneum. Radiation has a limited role. Recurrent or persistent tumors may require docetaxel, etoposide, topotecan, gemcitabine, liposomally encapsulated doxorubicin. Hormonal therapy with medroxy progesterone acetate and megesterol acetate along with chemotherapy has been tried. The five year survival rate is 95% for stage I, 75% for stage II, 69% for stage III and 45% for stage IV.
Conclusion:

Fallopian tube cancers are etremely rare and typically diagnosed with surgery; have poor prognosis inspite of its similarities with ovarian malignancies. The limited number of cases available poses difficulty in determining the treatment of choice necessitating further studies and evaluation.

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