

# Fallopian Tube Choriocarcinoma Presenting as Ovarian Tumour: A Case Report

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### ABSTRACT

Choriocarcinoma of the fallopian tube is a rare form of gestational trophoblastic disease. It can be gestational or non gestational choriocarcinoma, based on the origin. Fallopian tube choriocarcinoma has been reported commonly after ectopic pregnancy. Choriocarcinomas are germ cell tumours formed by trophoblastic elements.

A 26-year-old lady presented with pain and mass abdomen of 15 days duration. Clinical examination revealed a ovarian tumour with elevated beta HCG. The working diagnosis was ovarian choriocarcinoma. Patient was also found to be having pulmonary artery hypertension due to the metastasis to lungs. Staging laparotomy was done. Histopathology revealed it to be metastatic gestational choriocarcinoma of fallopian tube with vascular emboli. The stage was stage III and WHO scoring of 15. She received Etoposide, Methotrexate, Actinomicin, Cyclophosphamide and Oncovin therapy. Following treatment there was a significant drop in the beta HCG. Patient tolerated the chemotherapy well. This is a rare presentation of choriocarcinoma with good prognosis.

Keywords: Fallopian tube choriocarcinoma, Gestational choriocarcinoma

## **CASE REPORT**

A 26-year-old lady, para one living none presented with mass abdomen, pain in the lower abdomen, vomiting, loss of weight and loss of appetite, since 15 days. Her last child birth was two years back and was a neonatal death on 10<sup>th</sup> postnatal day. Her menstrual cycles were regular and she had no periods of amenorrhoea. On examination she was thin built, with a BMI of 14. Respiratory and cardiovascular system was unremarkable clinically. Examination revealed a mass of 24 weeks size which was cystic in consistency and restricted mobility, appearing to be arising from the right adnexa. There was no ascites & no nodularity in pouch of Douglas.

#### **INVESTIGATIONS**

Ultrasonography revealed a right sided complex adnexal mass of 10x10x5 cm with solid and cystic areas with increased vascularity in Doppler. Left ovary and uterus was normal. CT pelvis confirmed the findings. There was an elevated beta HCG, 151,545 mlU/ml however alphafeto protein and Lactate Dehydrogenase levels were normal.

Metastatic work up revealed lung metastasis [Table/Fig-1]. Preoperative work up revealed primary pulmonary artery hypertension and she was posted for staging laparotomy with the working diagnosis of germ cell tumour of the ovary.

#### TREATMENT

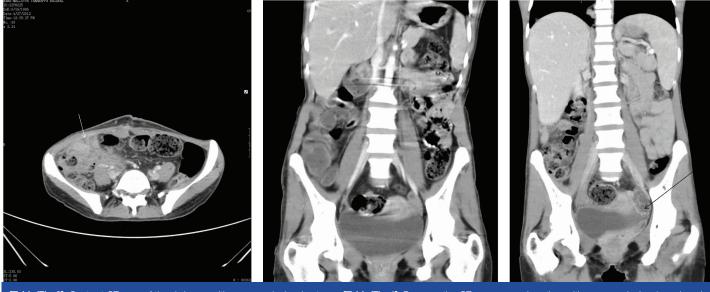
On opening the abdomen there was a vascular complex mass arising from the right adenexa, left tube, left ovary & uterus was normal [Table/Fig-2]. Tumour deposits were seen over the ascending colon. Right adenexectomy with partial infracholicomentectomy was done. Postoperateve recovery was uneventful. Histopathological examination confirmed the diagnosis of gestational choriocarcinoma of fallopian tube with vascular emboli. She was planned for adjuvant chemotherapy. CT thorax showed metastasis to the lungs and there was no evidence of metastasis to the brain by CT brain. She was in stage III (GTT extending to the lungs with or with out genital tract involvement with two risk factors i.e., beta HCG >



[Table/Fig-1]: Pre operative chest X Ray showing lung metastasis



[Table/Fig-2]: Intra operative picture of the adnexal mass appearing like ovarian tumor



[Table/Fig-3]: Contrast CT scan of the abdomen with arrow mark showing tumor [Table/Fig-4]: Pre operative CT scan, coronal section, with arrow mark showing adnexal mass [Table/Fig-5]: CT scan following treatment of choriocarcinoma

1,00,000 mlU/ml and duration of disease > 6 months of termination of pregnancy). WHO scoring system showed a total score of 15. She received 8 cycles of Etoposide, Methotrexate, Actinomycin, Cyclophosphamide and Oncovin therapy (EMA-CO). Beta HCG after the surgery was 2000 mlU/ml which dropped to < 10 mlU/ml following chemotherapy in 20 weeks. Follow up CT scan showed significant reduction in the size of the tumour deposits in the lungs and the pelvis [Table/Fig-3-5].

#### DISCUSSION

Fallopian tube cancers are most often a laparotomy or histopahological finding. They present as adenexal masses. It is found that 90 % of the fallopian tube cancers are serous adenocarcinoma. Choriocarcinoma of the fallopian tubes is an extremely rare entity. The reported cases are following ectopic pregnancy. In a review of 2100 cases of gestational trophoblastic disease (GTD) at New England Trophoblastic Disease Centre, 16 patients (0.76%) with GTD affecting Fallopian tubes were identified [1].

Primary choriocarcinoma of the Fallopian tube is rare; as of 1981, only 100 cases had been reported in the world literature [2].

The presentation is similar to ovarian tumour. These patients are treated with adenexectomy with or without chemotherapy. The staging is similar to the FIGO staging of uterine choriocarinoma with the WHO scoring. The survival was found to be 95% in the cases reported [3].

Fallopian tube choriocarcinoma can be gestational or nongestational. Gestational choriocarcinoma can occur after molar pregnancy, tubal pregnancy or antecendent normal pregnancy. The etiology has been attributed to low nutrition and vitamin A deficiency. Fallopian tube choriocarcinoma following antecedent normal pregnancy the prognosis is poor [4].

### CONCLUSION

Choriocarcinoma of fallopian tube is a rare entity. Presentation is similar to ovarian tumour. Staging laparotomy with chemotherapy gives good survival

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