NON-GESTATIONAL AND NON-GONADAL CHORIOCARCINOMA DIFFICULTIES IN DIAGNOSIS AND MANAGEMENT
INTRODUCTION

• Ovarian choriocarcinomas can be gestational or non gestational in origin.

• Incidence:
  ➢ Gestational - 1 in 369 million pregnancies
  ➢ Non gestational - ≤0.6% of all ovarian neoplasms

• Pure non gestational ovarian choriocarcinomas are extremely rare. Regarding non gestational extragonadal choriocarcinomas few cases have been recorded.
• Gestational choriocarcinoma may arise from an ectopic ovarian pregnancy or present as a metastasis from a uterine or tubal choriocarcinoma.

• Non gestational type is a rare germ cell tumour with trophoblastic differentiation. Non gestational extragonadal choriocarcinomas are teratogenic in origin.
OBJECTIVES

• Non gestational choriocarcinoma is a extremely rare variety of tumour. Due to its rarity information on the clinicopathological features, diagnosis and therapeutic options is limited. Hence our objective of reporting and recording two such cases is to gather experience of others in formulating diagnosis and management issues.
CASE 1

8 year old girl presented at gynae OPD with abdominal pain and swelling for 3-4 months.
• General examination- height-112cm, weight-23kg, BMI-18.33, moderate pallor, no lymphadenopathy.

• P/A examination- a huge abdomino-pelvic mass, firm and fixed, extending above the umbilicus.

• Investigations- Hb 7gm%  
  serum CA-125, AFP: WNL  
  Chest X-Ray, IVP- Normal study  
  USG- a heterogenous mass occupying entire pelvis & extending to upper abdomen, measuring 18.2cm×15.45cm
• A provisional diagnosis of OVARIAN MASS was made.
• On laparotomy- a huge abdomino-pelvic mass, extending to upper abdomen, with extreme vascularity noted. Abdomen was closed following only taking biopsy from the mass, as profuse haemorrhage was encountered during dissection.
• Serum β-HCG level on 1st post-operative day- 1,25,000mIU/ml
• Histopathology report- Non gestational choriocarcinoma
• Parents were counselled regarding multi-agent chemotherapy & relaparotomy as further management plan. Parents declined such invasive treatment and took their girl back home.
CASE 2

29 year old, P1+0+2+1, presented at gynae OPD on 29.11.2013 with abdominal pain and swelling for last 1-2 months.
• General examination-height 149cm, weight 39kg, BMI 17.56, moderate pallor, no lymphadenopathy or thyroid enlargement.
• P/A examination-a huge abdomino-pelvic mass of 18-20 weeks size, firm and cystic, with restricted mobility.
• P/V examination-same mass of similar features felt. No nodularity felt in the Pouch of Douglas.
• Investigatıons- Hb 9.6gm%
CA-125 - 32.9
Chest X-Ray- normal study
❖USG(19/11/2013): left sided large tubo-ovarian mass 9.8cm×8.1cm with left sided hydro-nephrosis.

• Provisional diagnosis- OVARIAN MASS
• Laparotomy on 04.12.2013-a extremely vascular, huge abdomino-pelvic mass, extending to upper abdomen.

• Mass was located with the uterus in front and sigmoid colon loop behind.
• Uterus was of normal size. Both the ovaries found to be studded with multiple cysts of approx 4-6cm size.

• The omentum, undersurface of diaphragm, liver, paracolic gutters - Normal


• Specimen sent for HPE.
Trend Of βHCG

- β-HCG mIU/ml
MICROPHOTOGRAH SHOWING NEOPLASTIC CELLS IN SYNCYTIAL PATTERN WITHOUT ANY VILLOUS FORMATION. AREAS OF HAEMORRHAGE AND NECROSIS ALSO SEEN. CHORIOCARCINOMA.

By Courtesy: Prof (Dr) Subir K. Dutta
• CECT abdomen (done on 9th post operative day) – the residual pelvic mass measuring 16.5cm×12.3cm×9.9cm.
• CECT Brain and Chest – Normal study.
• Patient was treated with chemotherapy METHOTREXATE and FOLINIC ACID
• 1\textsuperscript{st} cycle of chemotherapy administered from 16\textsuperscript{th} to 23\textsuperscript{rd} of december 2013
• 2\textsuperscript{nd} cycle of chemotherapy administered from 9\textsuperscript{th} to 16\textsuperscript{th} january 2014.
DISCUSSION

• Due to rarity of the clinical scenario the clinical diagnosis was missed.
• Difficulties were faced during laparotomy specially during dissection of the mass, due to massive haemorrhage.
• Both the ovaries revealed presence of bilateral theca lutein cyst and were not involved in either of disease or metastasis.
• Patient received eight units of whole blood transfusion, during different phases of treatment.
• Prognosis of cases of non gestational choriocarcinomas has been reported to be poor, inspite of multi-agent chemotherapy.
• But this present case has responded well to 1\textsuperscript{st} cycle of single agent chemotherapy, as reflected by significant declining serum $\beta$-HCG level.
• However the exact tissue of origin of this non gestational choriocarcinoma is yet to be ascertained.
CONCLUSION

• Non gestational ovarian choriocarcinomas are extremely rare variety of tumour. Regarding non gestational extragonadal choriocarcinomas few such cases have been reported.

• Because of rarity of the situation no guidelines or protocols for evaluation and management of such cases are available.

• We are managing this patient guided by our previous experiences, information from the available literature, patient’s response to chemotherapy and also with the experience of other experts.