

INTRODUCTION:

Ovarian germ cell tumours arise from primordial germ cells of the embryonal glands. Presence of more than 2 germ cell elements is considered as mixed germ cell tumor. Malignant mixed germ cell tumours are very rare (0.01% incidence) and aggressive cancers affecting young adolescent girls. The commonest combination reported in literature is dysgerminoma and endodermal sinus tumor. There are only few case reports of mixed germ cell tumours with different combinations of malignant components. We report a very rare case of malignant mixed germ cell tumour consisting of endodermal sinus tumour, Immature Teratoma and embryonal carcinoma.

MANAGEMENT:

Staging laparotomy with fertility sparing surgery done (left salpingo-oophorectomy + infracolic omentectomy + peritoneal biopsy + pelvic lymph node dissection). HPE of the specimen showed mixed germ cell tumor (85% - yolk sac tumor, 9% - Immature teratoma, 6% - embryonal tumor) with tumor deposits on omentum; FIGO stage 2-pT3N0M0 ovarian tumor. Patient is undergoing chemotherapy with BEP regimen.

CASE REPORT:

A 14 year old girl presented with the complaint of mass per abdomen since 1 month which rapidly increased in size. History revealed that she attained menarche at 12 yrs and had regular menstrual cycles with normal flow. On examination, abdominal distension was seen and on palpation, a non tender mass of about 15*15cm was felt occupying all the abdominal quadrants with a smooth surface, variable consistency and irregular borders, it was mobile in both horizontal and vertical planes. USG showed an abdominopelvic mass of size 13*12*9cm with internal vascularity suggestive of neoplastic ovarian mass. Tumor markers were sent: AFP- 1210 ng/ml, LDH- 2166 U/L, β -hCG -243 mIU/L. MRI was done which showed an abdominopelvic lesion of size 19*16*12cm with T1 iso and T2 heterogenous intermediate signal intense lesion with multifocal cystic changes of varying sizes. Bilateral ovaries were not visualised separately. F/o germ cell neoplasm of ovarian origin.

DISCUSSION:

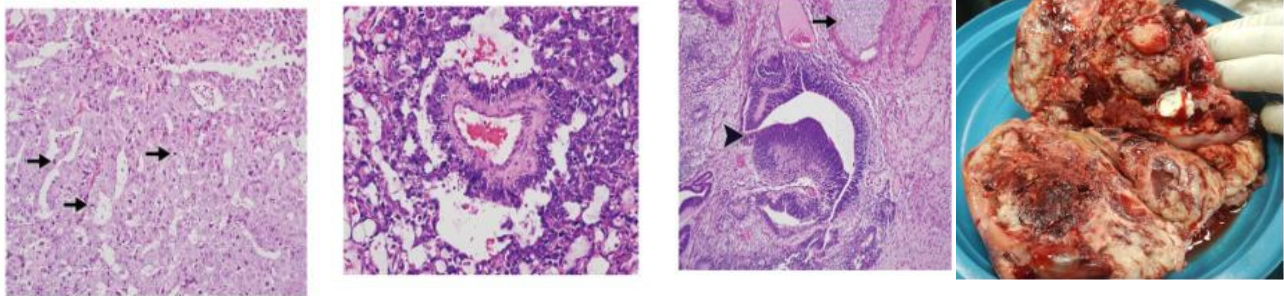
These are rapidly growing tumors & commonly present with mass per abdomen, acute/subacute pelvic pain. They may produce pressure symptoms on the bladder or rectum, menstrual irregularities or rarely precocious puberty. Usually managed with surgery f/b BEP chemotherapy. The most important prognostic factor is the size of the primary tumor.

CONCLUSION:

They usually have poor prognosis. Total hysterectomy with bilateral salpingo-oophorectomy with complete surgical staging f/b combination chemotherapy should be performed at advanced stage. Fertility preservation is a concern as these patients are usually young adolescent girls but treatment must be individualized on the basis of tumor type, surgical staging, and availability of combination chemotherapy.

REFERENCE:

- Gyn Oncology: Edited by Charles A. Leath II
- National Comprehensive Cancer Network (NCCN) Guidelines:*



BEP	
Bleomycin	30,000 IU on days 1, 8, and 15 every 3 wks
Etoposide	100 mg/m ² /day × 5 days every 3 wks
Cisplatin	20 mg/m ² /day × 5 days, or 100 mg/m ² /day × 1 day every 3 wks