**Conclusions:** Limited data exists about the histological type distribution, surgical treatment and overall survival of epithelial ovarian tumors in women aged below 35 years. Young patients have higher overall progression-free survival and a better clinical outcome than older patients. Any women presenting with pain and nonspecific symptoms should be investigated and evaluated properly.

#### **Ovary: Oral Abstract**

# Association of organochlorine pesticides and risk of epithelial ovarian cancer: A case control study

# Darshana Mazumdar

AIIMS, New Delhi, India

Background: Organochlorine pesticides (OCPs) belongs to the class of hydrocarbons characterized by its cyclic structure. Due to their persistent nature OCP gets accumulated in the food chain and cause possible adverse health effects specifically various hormone mediated disorders. Ovarian cancer is also one of the hormone dependant cancer and begins with the transformation of cells that comprises the ovaries including surface epithelial, germ cells, etc. It has been suggested that endocrine disruption, exposure to xenobiotic and subsequent oxidative stress may antedate ovarian cancer and contribute to its pathogenesis. However, no report regarding any association of OCP level with etiology of epithelial ovarian cancer is so far available among North Indian population.

Methods: A total of 120 subjects were included in this case control study, consisting of 60 histological proven cases of epithelial ovarian cancer and 60 controls subjects. Quantification of OCP levels was done by Perkin Elmer Gas Chromatograph (GC) equipped with 63Ni selective Electron Capture Detector. Results: Levels of b-HCH, endosulfan I, p'p'-DDT, p'p'-DDE and heptachlor were found significantly high in cases of epithelial ovarian cancer as compared to control. A significant association was also observed between higher levels of b-HCH and heptachlor and EOC with odds ratio of 2.76 and 2.97 respectively.

**Conclusion:** Results indicate the plausible role of OCPs with the pathogenesis of epithelial ovarian cancer among North Indian population. Moreover, it is one of the first report suggesting significant level of heptachlor among north Indian women population with epithelial ovarian cancer.

### **Ovary: Oral Abstract**

# Female adnexal tumour of probable wolffian origin: A rare case report

#### Nehal Dhaduk, Mamta Dagar, Mala Srivastava, Punita Bhardwaj, Tina Verma, Indrani Ganguli, Nayak

**Introduction:** Female adnexal tumour of probable wolffian origin (FATWO), is a rare neoplasm arising within the leaves of a broad ligament or hanging from it or a fallopian tube. It is considered a tumour of low malignant potential which shares similar histological and immunochemical features with mesonephric remnants.

Case: Here we present a case repot of a 40 years old, nulliparous female who presented with acute pain abdomen and fever since 2 days. Her LMP was 30.09.2015 and her past menstrual cycles were irregular. She was nulliparous with history of infertility. In past medical history revealed her to be a known diabetic for 5 years, with uncontrolled blood sugars. Patient was hemodynamically stable. On per abdominal examination there was generalized tenderness all over the abdomen with guarding and rigidity. On per speculum examination vaginal discharge was noted with unhealthy cervix. Per vaginal examination revealed a tender mass of approximately 8 cm imes 6 cm was felt on left fornix. All her base line investigations were normal. The salient investigations like CA-125 35.60 IU/L, CEA 3.46, Beta-HCG 2.29 were normal. On imaging, MRI showed a well defined solid cum cystic space occupying lesion of 9 cm × 8 cm arising from left adnexa with evidence of right hemorrhagic adnexal cyst 6 cm × 7 cm and hydro/hematosalpinx noted. There was well defined space occupying lesion in the pelvis on the left of the uterus which is likely a broad ligament leiomyoma. Diagnosis of acute abdomen was made with adnexal mass probably infectious in origin. Injectable antibiotics were started. In view of acute pain abdomen decision for surgical intervention was taken. Laparoscopic findings revealed bilateral ovarian abscess with left sided broad ligament mass (solid consistency)

probably leiomyoma. Right tube and ovary were normal. Drainage of tuboovarian abscess with left salpingo-oophorectomy with right salpingectomy with adhesiolysis was done and sent for histopathology. HPE reported Female adnexal tumour of probable wolffian origin (FATWO) which was positive for vimentin and CD10, possibly arising from left sided broad ligament. Patient underwent radical hysterectomy with omentectomy with appendicectomy was done in view of FATWO.

**Conclusion:** Female adnexal tumour of probable wolffian origin (FATWO), is a rare neoplasm which is usually considered as benign, although in some cases metastasis on recurrences have been reported even after a long interval following the initial diagnosis. Pre-operative diagnosis of FATWO is very difficult because of the rarity of the disease and paucity of the literature available.

# **Ovary: Oral Abstract**

Role of human epididymis protein 4 for detection of ovarian carcinoma in adnexal masses: A pilot study

Nidhi Bansal, A. Suneja, K. Guleria, N. B. Vaid, K. Mishra, S. Bhatt, M. Mehndiratta UCMS and GTB Hospital, New Delhi, India

**Introduction:** HE4 is a novel tumour biomarker used for early diagnosis of ovarian cancer. This study evaluated the diagnostic accuracy of HE4 alone and in combination with CA125, risk of malignancy index (RMI), risk of malignancy algorithm (ROMA).

Methods: It was a cross sectional study conducted recruiting 88 women with adnexal masses who were planned for surgery. After baseline work up and ultrasound examination, serum samples were collected for estimation of CA 125 and HE4 levels. Serum HE4 levels were estimated using ELISA kit. RMI and ROMA score were calculated and diagnostic accuracy of HE4, CA 125, RMI, ROMA and their combination were compared. Cut off for HE4 and ROMA score were calculated using ROC curve.

Results: Of 88 subjects, 66 were analyzed with 19 malignant (including 5 LMP) and 47 benign cases. The median value of HE4 among malignant cases was found to be significantly higher than among the benign cases. PPV and NPV of HE4 at a cut off 130.8 pMol/ml was 85.7% and 77.9% respectively. Highest PPV (88.9%) with acceptable NPV (80.7%) was found with ROMA followed by HE4 (PPV 85.7%; NPV 77.97%), RMI (PPV 76.92%; NPV 83%) and CA125 (PPV 52%; NPV 80.85%).

**Conclusion:** HE4 levels were lower in Indian population both in malignant and benign tumours as compared to other studies. HE4 is a good discriminator and gives best accuracy when it is combined with CA125 in a logistic algorithm, ROMA.

### **Ovary: Oral Abstract**

Gestational trophoblastic neoplasia: Retrospective analysis of clinical profile, treatment pattern and outcome

Paramjeet Kaur, Ashok K. Chauhan, Anil Khurana, Yashpal Verma, Nupur Bansal

Department of Radiotherapy, Pt. B.D. Sharma, PGIMS, Rohtak, Haryana, India

**Background:** Gestational trophoblastic disease is a spectrum of cellular proliferation arising from the placental villous trophoblast. Gestational triphoblastic neoplasia (GTN) is a collective term for GTD that invade locally or metastasize. GTD includes hydatidiform mole (complete and partial) and GTN include invasive mole, choricocarcinoma, placental site trophoblastic tumor and epitheliod trophoblastic tumor.

Aim: To evaluate clinicopathological profile, treatment pattern and clinical outcome in patients with gestational trophoblastic neoplasia (GTN).

Materials and Methods: Twelve cases of gestational trophoblastic neoplasia treated between 2012 to November 2015 in Department of Radiotherapy – II, PGIMS, Rohtak were evaluated in this retrospective study. Data was analyzed on the basis of age, histopathology, stage, type of treatment received and treatment related toxicities. Disease free survival was estimated.

**Result:** Out of 12 women 7 (58 %) had hydatidiform mole, 4 (33%) invasive mole and 1 (8%) had choriocarcinoma. All the cases were given chemotherapy. Two patients had low risk disease. Among high risk group seven patients