surgery in the IDS group. Patient who received paclitaxel + carboplatin as first line chemotherapy had better survival than carboplatin alone or cyclophosphamide + cisplatin.

Conclusion: NACT as an alternative option to primary debulking surgery in operable EOC is still debatable. But for patient with high disease burden where optimal cytoreduction is not possible NACT strategy is a valid option. Recent randomised controlled trials from Europe had shown the noninferiority of neoadjuvant chemotherapy followed by IDS when compared to the primary debulking surgery in operable advanced EOC.

Key words: Epithelial ovarian cancer; interval debulking surgery; neoadjuvant chemotherapy

Ovary: Oral Abstract

Malignant ovarian germ cell tumors in children: A single centre experience

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Background: Germ-cell tumors (GCT) are the commonest ovarian neoplasm in the first two decades of life.

Aim: To study the profile of ovarian GCT in children and their outcome.

Methods: Retrospective study of all cases of malignant ovarian GCT in the pediatric age (up to 18 years) was done from January 2002 to December 2015. The medical records of all admitted cases during this period were reviewed and the data was analysed with respect to age at diagnosis, clinical presentation, tumor markers, surgical stage, tumor histology, therapy, clinical course, and outcome.

Results: Girls with malignant ovarian GCT were seen at our institute during the study period. Out of these 25 underwent treatment. Mean age at presentation was 11.7 years (range: 3-18 years). Abdominal pain was the commonest presentation. Twelve (47.3%) had right sided disease, 11 (42%) had left sided disease and 2 had bilateral disease. Twelve cases (57.8%) were diagnosed as stage I disease. 5 (10.5%) as stage II, 7 (26.3%) as stage III and 1 (5.2%) as stage IV. Elevated AFP > 1000 was found in 9 (47.3%), elevated B-HCG (>5000) in 7 (42%) and elevated LDH (>1000) in 7 (36.8%) patients at presentation. Twenty (73.6%) patients underwent surgery prior to chemotherapy out of which 4 (21%) patients presented after undergoing surgery at other centre. Fourteen (57.8%) patients received 4 cycles of BEP based chemotherapy, 6 (21%) received 3 cycles, 2 (10.5%) received 2 cycles and 1 patient did not receive any chemotherapy as it was mature teratoma. The most common histology was dysgerminoma in 8 (42%) patients followed by mixed germ cell tumor in 4 (21%), teratoma in 3 (15.7%), embryonal carcinoma in 2 (10.5%) and yolk sac tumor and mature teratoma in 1 patient each. Four (21%) patients had relapse on contralateral side which was salvaged. 1 patient presented with relapse who underwent only surgery outside, 1 patient had ovarian torsion. Median follow up is 27 months. The event free survival rate was 78.9%.

Conclusion: This study confirms an excellent outcome for girls with ovarian germ cell tumor. Patients with advanced surgical stage relapsed frequently. The mainstay of treatment is fertility preserving surgery and cisplatin-based chemotherapy.

Ovary: Oral Abstract

Role of cancer antigen 19-9 in complex ovarian tumors

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Background: Cancer antigen 19-9 (CA 19-9) is a tumor-associated mucin glycoprotein antigen that may be elevated in healthy individuals as well as in patients with benign and malignant tumors. It is useful in the management of pancreatic and other gastrointestinal tumors. CA 19-9 is also elevated in benign and malignant ovarian tumors.

Aim: To study the pattern of serum CA 19-9 in complex ovarian tumors.

Methods: The study design was descriptive, based on data collected from medical records. Patients with a complex ovarian mass, who were investigated with CA 19-9 and had undergone surgery, were included in the study. The study duration was 2 years from January 2014 to December 2015. A total of 273 patients (119 benign and 154 malignant) with complex ovarian mass and elevated CA 19-9 underwent surgery during the study period.

Results: CA 19-9 was elevated in 55 patients (20%). Of these, 23 patients had benign tumors while 32 had malignant tumors. Among patients with benign tumors, 21 had dermoid, 23 had mucinous tumors and 75 had other types of tumors. CA 19-9 was elevated in 10 (47.6%) of the dermoids, 7 (30.4%) of the mucinous tumors and 6 (8%) of the other benign tumors. Among patients with malignant tumors, 138 were epithelial and 16 were non epithelial tumors. Of the epithelial tumors, 31 were mucinous and 107 were nonmucinous types. Overall, 29 (21%) had elevated CA 19-9. Of the epithelial tumors, 22.6% of the mucinous type and 20.6% of the non mucinous type had elevated CA 19-9. Among the non-epithelial tumors, 3 (18.8%) had elevated CA19-9.

Conclusion: CA 19-9 is elevated in several conditions but most likely to be raised in dermoid cysts and mucinous tumors. CA19-9 levels need to be interpreted along with clinical and radiological findings.