Clinicopathological review of Ovarian Tumors in Young Females and their reproductive & Survival outcome: Ten year experience from a tertiary center

Context: Limited data exists about the histological type, surgical treatment, survival and outcome of ovarian tumors in women below 35 years.

Objective: To find out the histopathological types of ovarian tumors in young females and correlation with reproductive and survival outcome.

Methods: A retrospective study analysis of females from 9-35 year of age group treated for ovarian tumors from January 2003 to July 2013 was performed. Variables studied included age, presenting symptoms, imaging, tumor markers, surgical findings, type of surgery, histopathology reports and follow-up. Main Outcome Measures were histopathological variant, FIGO stage, reproductive and survival outcome.

Results: A total of 155 young patients having ovarian tumors were evaluated. Clinical presentation was abdominal pain in 68 (43.8%), ascites 13 (8.3%) mass in abdomen 25 (16%), irregular menstruation 15 (9.6%), infertility 18 (11.6%), 12 (7.7%) found on ultrasound while 4 (2.6%) women had virilising symptoms. There were 92 (59.3%) cases of benign ovarian tumors, 6 (0.03%) borderline tumors whereas 57 (36.7%) were malignant. Among malignant tumors, epithelial were 30 (45.8%), germ cell 16 (28.7%), sex cord stromal 9 (15.7%), NHL 3.5% (2). In malignant tumors fertility sparing surgery was done in 22 (38.5%) women. The FIGO staging was as: I: 35 (61.4%); III: 20 (35.1%) and IV: 2 (3.5%). Mean follow-up time was 69 months (range of 6-120 months). Survival was 100 percent in borderline & stage I tumors while 58 percent in stage III. No survival seen in women with lymphoma. Five patient conceived during follow up.

Conclusions: Chances of having malignancies are high (37%) even in younger patients, 50% chance that they are epithelial tumors. Survival is good in fertility sparing surgery in stage I tumor.