

## Determining the prevalence, risk factors and management of borderline ovarian tumors

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### Abstract

**Introduction:** Approximately 10-15% of all epithelial ovarian tumors fall into the category of low malignant potential tumors (Borderline ovarian tumors) which tend to be confined to the ovary for a long period. Biologically, these tumors have low aggressive behavior and malignant potentials, therefore, early diagnosis, recognition of the signs and symptoms and management of these patients is of significant importance. The purpose of this study was to determine the prevalence, evaluate some risk factors and discuss the management of patients with borderline ovarian tumors.

**Materials & Methods:** This descriptive analytical retrospective study was performed on the medical files of 132 patients with ovarian epithelial cancers who had referred to the oncology departments of Ghaem and Omid Hospitals of Mashad University of Medical Sciences from 1994 to 2003. A questionnaire comprising of demographic data was filled for each patient. Statistical analysis was done by a computer using SPSS software for the calculation of t-test and  $\chi^2$ . The confidence interval was regarded 95%, while  $p < 0.05$  was considered significant.

**Results:** 16.6% of the patients had borderline ovarian tumors. The mean age of the patients was  $25.07 \pm 3.25$  SD years. The most common pathological type of tumor was borderline mucinous cystadenoma (71.3%). The majority of patients were in stage I of the disease (78.4%). Elevated CA-125 tumor marker was discovered in 42.1% of the patients. Conservative surgical management was performed in 42.1% and radical surgery for the rest of the patients. Recurrence had been seen in 21.3% of the patients. 21.3% of the patients had died because of extraovarian dissemination of the disease.

**Conclusion:** Borderline ovarian tumors are almost associated with good prognosis but because of probable recurrence and death, post-treatment serial follow-ups of these patients are recommended.

**Key Words:** Borderline ovarian tumor, Invasive epithelial ovarian cancer, Prognosis, Recurrence, Prevalence, Tumor marker, Disease stage, Conservative management, Chemotherapy.

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