608 (S-534)

International Workshop

日産婦誌53巻2号

国際ワークショップ

(ACOG-JSOG Joint Postgraduate Course)

Session 1: Recent Management of Ovarian Cancer

## Ovarian Cancer Screening, Prevention and Early Detection

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Since ovarian cancer is associated with such high morbidity and mortality, it is essential to focus on means of detecting this disease at its earliest stages and in developing prevention strategies. In the United States, there were 23,100 newly diagnosed cases and 14,000 deaths from ovarian cancer in 2,000. It is the fifth leading cause of cancer in women in the U.S. The early detection of ovarian cancer has eluded clinicians to date. However, recent clinical trials using serial serum tumor markers and transvaginal sonography with color flow Doppler suggest that earlier detection is possible in a select group of patients. These studies have confirmed that the disease can be diagnosed in an earlier stage. Whether this will translate into an improved survival awaits maturation of the data and larger clinical trials.

Approximately, 10% of ovarian cancer results from inherited genetic mutations. The majority of hereditary ovarian cancer results from inherited mutations in BRCA1 and BRCA2. The risk of ovarian cancer due to inherited BRCA1 mutations is 28% to 44% by age 70, compared to the general population of 1.8%. Mutations in BRCA2 confer an increased risk of ovarian cancer of approximately 27% by age 70, which represents a 15-fold increase compared to the general population. Although it was originally proposed that the risk of ovarian cancer was higher for mutations in certain regions of the BRCA1/2 genes, more recent studies have not confirmed a relationship between the location of a mutation and the likelihood of developing ovarian cancer. The benefits and limitations of increased surveillance, prophylactic surgery, and medications to reduce cancer risk should be considered for women with hereditary risk who do not themselves have cancer. It has been shown in the general population that oral contraceptives reduce the risk of ovarian carcinoma by approximately 50%. Recently, a retrospective study of 207 women with BRCA1/2 mutations demonstrated that the use of the oral contraceptives for 6 or more years was associated with a 60% reduction in ovarian cancer. A small study evaluating fenretinide in patients with breast cancer reported a reduction in the incidence of ovarian cancer in those patients receiving fenretinide. Confirmatory studies are on-going. Prophylactic surgical methods include oophorectomy and bilateral tubal ligation. The incidence of ovarian cancer appears to be reduced following tubal sterilization, although the data are not conclusive. Prophylactic ophorectomy reduces but does not entirely eliminate the risk of ovarian cancer. Interestingly, prophylactic oophorectomy has been shown to reduce the risk of breast cancer by nearly 50% in women with BRCA mutations.