

CANCER

Potential modulators of ovarian cancer risk assessed

Postmenopausal hormone therapy increases the risk of ovarian cancer, regardless of the formulation, dosage, route of administration and duration of use, report researchers in Denmark.

Despite intensive research efforts, very little is currently known about the underlying causes of ovarian cancer and primary prevention remains a challenge. However, data derived from several large studies have implicated postmenopausal hormone therapy in the etiology of this malignancy. Although a correlation between these two factors is widely accepted, few studies have investigated whether variations in the treatment regimen used (for example, type of progestin or cyclic versus continuous administration) modulate the risk of ovarian cancer.

This issue has now been addressed by Mørch and colleagues, who evaluated a group of women enrolled in the Danish

Sex Hormone Register Study (DaHoRS), a nationwide, prospective cohort study of Danish women aged 15–79 years. The main purpose of the DaHoRS was to investigate the effects of sex hormones on the risk of female cancers and cardiovascular disease. The investigators identified a group of 909,946 women without pre-existing ovarian cancer or history of bilateral oophorectomy. Information on the use of postmenopausal hormone therapy (type and number of prescriptions redeemed) and incidence of primary ovarian cancer during follow-up was obtained from national registries.

A total of 3,068 cases of primary ovarian cancer, most of which were epithelial in origin, were reported during a mean follow-up of 8 years (equivalent to 7.3 million women-years). When compared with women who had never used postmenopausal hormone therapy, Mørch *et al.* found an increased risk of ovarian

cancer in women who were current users, although the relative risk declined over time in women who had stopped using postmenopausal hormone therapy. Surprisingly, no statistically significant differences in the risk of ovarian cancer were identified when different components of the treatment regimen were analyzed separately.

Mørch and co-workers conclude that although use of postmenopausal hormone therapy is associated with an increased risk of ovarian cancer, individual differences in the treatment regimen exert very little effect on the overall risk.

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