## RESEARCH HIGHLIGHTS

#### CANCER

## Risk of endometrial cancer with combined estradiolprogestin therapy in postmenopausal women

Continuous estradiol-progestin therapy reduces the risk of endometrial cancer in postmenopausal women, a Finnish cohort study reveals.

Given the national differences in cancer risk, genes, lifestyle factors or content of hormone therapy, various hormone therapies could have differential effects on the risk of endometrial cancer in different countries. Ideally, "the impact of hormone therapy on the risk of various cancers should be studied in each country," says senior investigator Olavi Ylikorkala from the Helsinki University Central Hospital in Finland.

Ylikorkala and colleagues analyzed data on 224,015 Finnish women (aged >50 years) who had received combined estradiol–progestin hormone therapy for at least 6 months. A total of 1,402 endometrial cancers were recorded.

The Finnish researchers used a standardized incidence ratio analysis, in which the incidence of endometrial cancer in hormone therapy users was compared

to the expected incidence of this cancer in the total age-comparable background population. "The strength of our approach was, of course, that we could accurately calculate the true exposures to various progestins, formulations or modes of administration (oral versus transdermal)," explains Ylikorkala.

# ...hormone therapies could have differential effects on the risk of endometrial cancer in different countries 77

Sequential estradiol-progestin therapy (daily estradiol combined with 10–14 days of progestin once a month or at 3-month intervals) over 5 years was accompanied by a 69% rise in endometrial cancer risk if progestin was administered monthly and a 276% risk elevation if progestin was received every 3 months. Continuous estradiol-progestin therapy, on the

other hand, was accompanied by a 28% reduction in the risk of endometrial cancer within the first 3 years of use and a 76% reduction from 3–5 years onwards.

These changes in endometrial cancer risk were irrespective of the route of administration of the hormone therapy (oral or transdermal) or the type of progestin prescribed (medroxyprogesterone acetate, norethisterone acetate or dydrogesterone).

"The progestin addition is a doubleedged sword. It can increase the risk of breast cancer to some extent, but at the same time it reduces the risk of endometrial cancer, if given continuously. This must be considered when patients are prescribed hormone therapy," concludes Ylikorkala.

### Linda Koch

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