Oral contraceptive pills protect against ovarian and endometrial cancer

17 December 2020

A comprehensive study from Uppsala University involving more than 250,000 women shows that oral contraceptive use protects against ovarian and endometrial cancer. The protective effect remains for several decades after discontinuing the use. The study is published in the journal *Cancer Research*.

Ovarian and endometrial cancer are among the most common gynecological cancers, with a lifetime risk of just over 2%. Endometrial cancer is slightly more common but as it has clearer symptoms and is therefore often detected at an early stage, the mortality rate is low. However, ovarian cancer is among the deadliest cancers, since it is often not detected until it has already spread to other parts of the body.

The first oral contraceptive pill was approved already in the 1960s, and 80% of all women in Western Europe have used oral contraceptives at some point in their life. Oral contraceptives include estrogen and progesterin, which are synthetic forms of the female sex hormones. The estrogen and progesterin in oral contraceptives prevent ovulation and thereby protect against pregnancy.

In the current study, the scientists compared the incidence of breast, ovarian and endometrial cancers between women that had used oral contraceptive pills and never users.

"It was clear that women who had used oral contraceptive pills had a much lower risk of developing both ovarian and endometrial cancer. Fifteen years after discontinuing with oral contraceptives, the risk was about 50% lower. However, a decreased risk was still detected up to 30-35 years after discontinuation," says Åsa Johansson at the Department of Immunology, Genetics and Pathology, Uppsala University, one of the leading researchers behind the study.

However, oral contraceptive pills have previously been associated with an increased risk of breast cancer.

"Surprisingly, we only found a small increased risk of breast cancer among oral contraceptive users, and the increased risk disappeared within a few years after discontinuation," says Johansson. "Our results suggest that the lifetime risk of breast cancer might not differ between ever and never users, even if there is an increased short-term risk."

The results from the current study are important, since oral contraceptive use has commonly been associated with side effects such as deep vein thrombosis and breast cancer.

"In addition to protecting against pregnancy, we have shown that oral contraceptive pills also have other positive effects. Our results can enable women and physicians to make more informed decisions about which women should use oral contraceptive pills," says Therese Johansson, one of the Ph.D. students behind the study.

More information: Karlsson T, Johansson T,

Provided by Uppsala University


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