

Contemporary Hormonal Contraception Increases Relative Risk of Breast Cancer

Writer's Name

November 17, 2018 — Women who used current or recent hormonal contraceptives were at higher risk of breast cancer compared with those who never used hormonal contraceptives, a nationwide prospective cohort study showed.

Lina S. Mørch, PhD, senior researcher at Rigshospitalet, the Juliane Marie Center, Department of Gynecology, University of Copenhagen, Copenhagen, and colleagues reported the results of the study in the December 2017 issue of the *New England Journal of Medicine*.

An increasing percentage of women are using hormonal contraception these days. Contemporary products use new progestins and new routes of delivery. Progestin addition to hormonal contraceptives has shown to increase breast-cancer risk in postmenopausal women receiving hormonal therapy.

However, there is limited information and growing concern about the breast-cancer risk associated with progestin-only contraception or nonoral hormonal contraception. This study was an epidemiologic analysis of the association between the use of currently available hormonal contraceptives and the risk of invasive breast cancer.

Researchers studied all women living in Denmark between ages 15 and 49 years with no history of cancer, venous thromboembolism, or infertility treatment. Nationwide registries provided information about the use of hormonal contraceptives, breast cancer diagnosis, etc. Hormonal contraceptive use was categorized as : current, recent (discontinuation within the previous 6 months), or previous (discontinuation more than 6 months previously).

The study population (n = 1 797 932) reported 11 517 breast cancer cases after a mean follow-up of 10.9 years. The relative risk for breast cancer in women with current and recent use of hormonal contraception was 1.20 (95% CI, 1.14-1.26; $P = .002$). The relative risk for breast cancer was lower in women with less than 1 year of hormonal contraception use (1.09; 95% CI, 0.96-1.23; $P = .002$) compared with the relative risk for breast cancer in women with more than 10 years of hormonal contraception use (1.38; 95% CI, 1.26-1.51; $P = .002$).

The risk associated with current or recent use of progestin-only intrauterine system was higher than women who had never used hormonal contraceptives (relative risk, 1.21; 95% CI, 1.11-1.33). Relative risk varied between 1.0 and 1.6 for women on current or recent use of various oral combination contraceptives.

Even after discontinuation of hormonal contraception, the breast cancer risk remained elevated for women who used hormonal contraceptives for 5 years or more. However, approximately only 1 extra breast cancer was reported for every 7 690 women using hormonal contraception for 1 year.

“The estimated number of additional breast cancers among premenopausal women that were attributable to hormonal contraception is likely to be low. This risk should be weighed against important benefits of hormonal contraceptives such as good contraceptive efficacy and reduced risks of ovarian, endometrial, and perhaps colorectal cancer, “ Dr Mørch concluded.

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Reference:

Mørch LS, Skovlund CW, Hannaford PC, et al. [Contemporary Hormonal Contraception and the Risk of Breast Cancer](#). *N Engl J Med*. 2017;377(23):2228-2239.