

Comment in:

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Oral contraceptive use as a risk factor for premenopausal breast cancer: a meta-analysis.

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OBJECTIVE: To perform a meta-analysis of case-control studies that addressed whether prior oral contraceptive (OC) use is associated with premenopausal breast cancer. **METHODS:** We searched the MEDLINE and PubMed databases and bibliography reviews to identify case-control studies of OCs and premenopausal breast cancer published in or after 1980. Search terms used included breast neoplasms, oral contraceptives, contraceptive agents, and case-control studies. Studies reported in all languages were included. Thirty-four studies were identified that met inclusion criteria. Two reviewers extracted data from original research articles or additional data provided by study authors. We used the DerSimonian-Laird method to compute pooled odds ratios (ORs) and confidence intervals (CIs) and the Mantel-Haenszel test to assess association between OC use and cancer. **RESULTS:** Use of OCs was associated with an increased risk of premenopausal breast cancer in general (OR, 1.19; 95% CI, 1.09-1.29) and across various patterns of OC use. Among studies that provided data on nulliparous and parous women separately, OC use was associated with breast cancer risk in both parous (OR, 1.29; 95% CI, 1.20-1.40) and nulliparous (OR, 1.24; 95% CI, 0.92-1.67) women. Longer duration of use did not substantially alter risk in nulliparous women (OR, 1.29; 95% CI, 0.85-1.96). Among parous women, the association was stronger when OCs were used before first full-term pregnancy (FFTP) (OR, 1.44; 95% CI, 1.28-1.62) than after FFTP (OR, 1.15; 95% CI, 1.06-1.26). The association between OC use and breast cancer risk was greatest for parous women who used OCs 4 or more years before FFTP (OR, 1.52; 95% CI, 1.26-1.82). **CONCLUSION:** Use of OCs is associated with an increased risk of premenopausal breast cancer, especially with use before FFTP in parous women.

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