Induced Abortion and Breast Cancer Risk

Abstract: The relationship between induced abortion and the subsequent development of breast cancer has been the subject of a substantial amount of epidemiologic study. Early studies of the relationship between prior induced abortion and breast cancer risk were methodologically flawed. More rigorous recent studies demonstrate no causal relationship between induced abortion and a subsequent increase in breast cancer risk.

The relationship between induced abortion and the subsequent development of breast cancer has been the subject of a substantial amount of epidemiologic study. Early case-control studies that reported an association between induced abortion and subsequent development of breast cancer had significant methodological problems, most notably reliance on retrospective reporting of abortion history. A key methodological consideration in interpreting the evidence for any relationship between abortion and breast cancer risk is the sensitive nature of abortion, which could affect the accuracy in retrospective studies that rely on participant reports of having had an abortion.

In contrast to retrospective studies, prospective studies conclude there is no association between induced abortion and breast cancer. A world-wide meta-analysis of 83,000 women examined the relationship between induced abortion and breast cancer and found a significant difference between the overall estimate of relative risk (RR) from studies that had recorded information on induced abortion prospectively (RR, 0.93; 95% confidence interval, 0.89–0.96) and the overall estimate of RR from studies that had recorded such information retrospectively (RR, 1.11; 95% confidence interval, 1.09–1.14), suggesting that reporting bias was probably present in studies using retrospective reporting of abortion history (1).

In 2003, the National Cancer Institute convened the Early Reproductive Events and Breast Cancer Workshop to evaluate the current strength of evidence of epidemiologic, clinical, and animal studies addressing the association between reproductive events and the risk of breast cancer (2). The workshop participants concluded that induced abortion is not associated with an increase in breast cancer risk. Studies published since 2003 continue to support this conclusion (3–7).

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References


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