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INDUCED ABORTION AND THE RISK OF BREAST CANCER

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ABSTRACT

Background It has been hypothesized that an interrupted pregnancy might increase a woman's risk of breast cancer because breast cells could proliferate without the later protective effect of differentiation.

Methods We established a population-based cohort with information on parity and vital status consisting of all Danish women born from April 1, 1935, through March 31, 1978. Through linkage with the National Registry of Induced Abortions, information on the number and dates of induced abortions among those women was combined with information on the gestational age of each aborted fetus. All new cases of breast cancer were identified through linkage with the Danish Cancer Registry.

Results In the cohort of 1.5 million women (28.5 million person-years), we identified 370,715 induced abortions among 280,965 women (2.7 million person-years) and 10,246 women with breast cancer. After adjustment for known risk factors, induced abortion was not associated with an increased risk of breast cancer (relative risk, 1.00; 95 percent confidence interval, 0.94 to 1.06). No increases in risk were found in subgroups defined according to age at abortion, parity, time since abortion, or age at diagnosis of breast cancer. The relative risk of breast cancer increased with increasing gestational age of the fetus at the time of the most recent induced abortion: <7 weeks, 0.81 (95 percent confidence interval, 0.58 to 1.13); >12 weeks, 1.38 (1.00 to 1.90) (reference category, 9 to 10 weeks).

Conclusions Induced abortions have no overall effect on the risk of breast cancer. (N Engl J Med 1997; 336:81-5.)

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