

Breast Cancer and Abortion

A joint committee opinion from the Society of Obstetricians and Gynaecologists of Canada and the Society of Gynecologic Oncologists of Canada

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BACKGROUND

During the past several years, there has been confusion over the relation between spontaneous and induced abortions and subsequent breast cancer.

DISCUSSION

In a collaborative reanalysis of data from 53 epidemiologic studies that included 83 000 women with breast cancer from 16 countries, the overall relative risk (RR) of breast cancer for women having one or more pregnancies that ended as a spontaneous abortion versus women with no such record was 0.98 (95% confidence interval [CI] 0.92–1.04, $P = 0.5$). The corresponding RR for induced abortion was 0.93 (95% CI 0.89–0.96, $P = 0.0002$). Among women with a prospectively documented spontaneous or induced abortion, the risk of breast cancer did not differ significantly according to the number or timing for either type of abortion.¹

Two studies,^{2,3} published too late for inclusion in the above collaborative reanalysis, confirmed that neither induced nor

spontaneous abortion was associated with increased risk of breast cancer. Paoletti and Clavel-Chapelon² found no association between a history of induced abortion and breast cancer risk either in the whole population (RR 0.91; 95% CI 0.82–0.99) or in subgroups defined by parity or by menopausal status. Overall, there was no significant association between spontaneous abortion and breast cancer (RR 1.05; 95% CI 0.95–1.15). However, with increased number of spontaneous abortions (3 or more), the risk of breast cancer decreased in premenopausal women (RR 0.55; 95% CI 0.26–1.14) and increased in postmenopausal women (RR 1.50; 95% CI 1.10–2.05), based on 7 and 42 incident breast cancer cases of a total 3022. Erlandsson et al.³ reported a significantly reduced risk of breast cancer in women with a history of at least 1 compared with no abortions (adjusted odds ratio [OR] 0.84; 95% CI 0.72–0.99). The adjusted OR decreases step-wise with number of abortions to 0.59 (95% CI 0.34–1.03) for 3 or more abortions, compared with no abortions. The patterns are similar for induced and spontaneous abortions.

OPINION STATEMENT

A history of induced or spontaneous abortions is not associated with an increased risk of breast cancer (II-2).

RECOMMENDATION

In counselling women with a history of an induced or spontaneous abortion, one should be reassuring about subsequent breast cancer risk (A).

REFERENCES

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