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research-article

RISK FACTORS FOR SPONTANEOUS ABORTION AND ITS RECURRENCE

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Pregnancy histories of women interviewed as normal population controls during 1974–1981 in four case-control studies in the US and Canada were examined to identify risk factors for the occurrence of miscarriage. In total, 2,068 ever-gravid women aged 20–79 years at interview (mean age, 50.3 years) described 6,282 pregnancies, including 805 miscarriages. The roles of previous pregnancy history, age at pregnancy, and other factors were evaluated using relative risk binomial regression methods (similar to logistic regression). Risk of miscarriage during a given pregnancy was found to increase directly with the number of previous miscarriages (the risk was closely approximated by $(1 + \text{number of prior miscarriages})^{1.01}$), but appeared to be unrelated to the order of miscarriages within all previous pregnancies. Maternal age was also highly related to risk after controlling for gravidity and previous miscarriages, with doubled risk (compared with age 20 years) seen for pregnancies in women older than age 40 years. Risk of miscarriage did not appear to be associated with years since previous pregnancy, height, weight or obesity, use of oral contraceptives within one year

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before pregnancy, or duration of oral contraceptive use. A slight increase in risk was seen for women who had ever regularly smoked cigarettes (relative risk = 1.14, 95 per cent confidence limits = 1.00, 1.30). Thus, the levels of risk of miscarriage found in this analysis are similar to those of previous studies, and the analytic methods suggest how age, obstetric history, and other factors can be simultaneously examined for associations with such risk.

abortion; epidemiologic methods; pregnancy

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