

Trial watch

CONCENTRATING ON CONTRACEPTION

A report in the *British Medical Journal* has shown that overall, women who have taken the oral contraceptive pill do not have an increased risk of developing cancer.

The Royal College of General Practitioners' oral contraception study in the UK began in May 1968. 23,000 women who were never users and 23,000 women who were users (ever users) of the pill were recruited. In the mid 1970s three quarters of the original cohort were flagged at central registries of the UK National Health Service, so that outcome data (development of cancer or death) could still be obtained, even if the women were no longer followed up by their doctor. 24% of the women could not be flagged for follow up as they or their doctors had left the study before flagging occurred.

The main data set considered in this study included all flagged women (except those who were never users lost to the study before age 38, as subsequent use of oral contraceptives could not be ruled out), and non-flagged women until they were lost from the study.

The main data set had 744,000 women years of observation for ever users and 339,000 women years for never users. Ever users, compared with never users, had a 12% reduction in the risk of any cancer (adjusted relative risk (RR) 0.88, 95% confidence interval (CI) 0.83–0.94). Statistically significant reduction rates were evident for cancers of the large bowel or rectum, uterine body and ovaries, and those of site unknown and other. No obvious difference was evident for other common cancers including breast cancer. Overall there was a 29% reduced risk of the main gynaecological cancers combined.

The median time for use of oral contraceptives in the study cohort was 44 months and for women who used the pill for more than 8 years there was a statistically significant increase in the risk for any cancer (adjusted RR 1.22, 95% CI 1.07–1.39), and specifically cervical (adjusted RR 2.73, 95% CI 1.61–4.61) and nervous system and pituitary tumours (adjusted RR 5.51, 95% CI 1.38–22.05). However, there was a clear significant reduction in the risk of ovarian cancer (adjusted RR 0.38, 95% CI 0.16–0.88), which remained statistically significant for 15 years after stopping use of oral contraceptives. This protective effect was maintained beyond 15 years, but was reduced to statistically non-significant levels.

A major strength of this study was the inclusion of more than a million women years of observation, accumulated over 36 years. Therefore, in a relatively healthy female population in the UK, one could conclude that the cancer benefits associated with oral contraceptives outweigh the risks. However, the balance of cancer risks and benefits evident in this study might vary internationally as a result of different patterns of oral contraceptive use and variation in the incidence of specific types of cancer.

ORIGINAL RESEARCH PAPER Hannaford, P.C. *et al.* Cancer risk among users of oral contraceptives; cohort data from the Royal College of General Practitioner's oral contraception study. *Br. Med. J.* 11 September 2007 (doi:10.1136/bmj.39.289.649.410.55)