
The latest report from this large cohort study includes over a million years of observation, accumulated over 36 years. The advantage of reporting at this stage is that many women in the cohort study are now postmenopausal and at an age when cancers are more common.

When compared with the 339 1000 never-users of oral contraception, the incidence of cancers among 744 000 ever-users was significantly lower for colorectal, uterine body cancer and a significantly increased risk of ovarian cancers. There was a non-significant increased risk of cervical cancer, which was unaffected by adjusting for smoking and other potential confounders. The risk of breast cancer was not increased [relative risk (RR) 0.98, CI 0.87–1.10] and the risk of any cancer was significantly reduced (RR 0.88, CI 0.83–0.94).

Information on type and duration of oral contraceptives used was obtained from a smaller subset of women (i.e. ≥28 years). Oral contraception was associated with a significantly reduced risk of ovarian and uterine body cancer and a significantly increased risk of cervical cancer. Between the protective effect on ovarian cancer and the excess risk of cervical cancer persisted 10–15 years after stopping.

One unexpected finding was an increased incidence of brain or pituitary cancers (RR 5.51, CI 1.38–22.05). The number of tumours was small and the confidence interval is wide so the risk is likely to be of low clinical significance if it exists at all.

The findings of this study are largely reassuring and they are remarkably consistent with those of the Oxford Family Planning Association and Luie et al previously reviewed in this journal. Thus the conclusions are likely to be valid despite potential bias from the large losses to follow-up and changes in estrogen dose with time. Patients alarmed by the CNS tumour data should be reminded that suggestions of a link between mobile phones and brain tumours have not caused them to throw away their phones, so they should think twice about throwing away their pills.

Reviewed by Louise Melvin, MRCOG, MFFP, Subspecialty Specialist Registrar, Family Planning & Well Woman Clinic, Edinburgh, UK

References


The oral contraceptive (OC) pill remains one of the most popular means of contraception worldwide. Previously, recent OC use had been shown to be associated with a slightly higher breast cancer incidence amongst younger women! However, the Royal College of General Practitioners’ oral contraception study contradicts these findings. It showed no difference in the incidence of breast cancer between never-users and ever-users of OCs.2 The impact of OC use on survival after diagnosis of breast cancer is not known.

The aim of the study by Wingo et al. was to examine the relationship between OC use and death from breast cancer over a 15-year follow-up period. It linked data from the CASH (Cancer and Steroid Hormone) study with mortality data from the Surveillance, Epidemiology and End Results Program. The CASH study was a large, American, population-based, case-control study designed to examine the risks of OCs and breast, ovarian and endometrial cancers.3 Women aged 20–54 years with histologically confirmed primary breast cancer between 1980 and 1982 were interviewed 1–31 (mean, 12) weeks after diagnosis. OC use in this study was shown not to be associated with a higher incidence of breast cancer development. Over 95% of interviews were successfully linked to the breast cancer registry data from the Surveillance, Epidemiology and End Results Program.

A total of 4292 women were included in this study; 1473 died of breast cancer during the follow-up period. Survival rates were 80% at 5 years and 64% at 15 years. This correlates with current UK breast cancer mortality statistics.4 There was no association between mortality and duration of OC use, women age at first use or time since first use. The risk of death decreased significantly with increasing time since last use but there was no consistent gradient effect. The overall conclusion was that there was no evidence of either benefit or harm from prior OC use on long-term survival after diagnosis of breast cancer. The main limitation of the study is that the findings are based only on risk factors reported during the initial interview after diagnosis. The study was unable to provide information on hormone receptor status or genetic factors such as BRCA1 or BRCA2 status, or indeed on new or continued OC use after diagnosis. However, there was a long follow-up period with a very low loss to follow-up (less than 3%), which makes the key findings particularly reassuring.

Reviewed by Shazia Bhatti, MRCOG Specialist Registrar in Obstetrics and Gynaecology, Luton and Dunstable Hospital NHS Foundation Trust, Luton, UK

References