EDITORIAL

Combined oral contraceptive pill lowers ovarian cancer risk

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WOMEN WHO USE THE COMBINED ORAL CONTRACEPTIVE PILL (COCP) ARE AT REDUCED risk of developing ovarian cancer, a benefit which persists for several years after cessation, a nationwide cohort study from Denmark has found.[1]

Using linkages from national registries, data on contraceptive use and ovarian cancer diagnoses for all women in Denmark aged 15-49 years, from 1995 to 2014, were obtained. Women with cancer, those who developed a DVT, or had fertility treatment, were excluded from the study.

'Relative risk of ovarian cancer in ever users of the COCP compared with never users was 0.66'

Overall nearly 1.9 million women were included in the study. Their hormonal contraceptive use was categorised as never use, current or recent use (up to 1 year after stopping use), and former use (more than 1 year after stopping use). The vast majority (86%) of hormonal contraception users had used the COCP.

The women were followed up to first diagnosis of ovarian cancer, death, emigration, age 50 years, or end of follow-up (31 December 2014). Over the 20-year study period, and 21.4 million person-years of observations, 1,249 cases of ovarian cancer were identified. There were 478 cases in ever users of hormonal contraception over 13.3 million person-years. In never users there were 771 cases over 8.1 million person-years.

The age standardised incidence of ovarian cancer was 3.2/100,000 person-years in ever users compared with 7.5/100,000 person-years in never users. Relative risk (RR) of ovarian cancer in ever users of the COCP compared with never users was RR 0.66 (95% CI: 0.58-0.76).

Risk reduction was greater with longer use; RR 0.82 for ≤1 year's use vs 0.26 for > 10 years' use. The risk reduction benefit waned after cessation and had become non-significant by ten years. Nearly three-quarters (71%) of the ovarian cancers in this study were in women over 40 years of age.

No protective effect was seen with progestogen only pills but the number of users in the study was small.

Much of the evidence for a protective effect of the COCP against ovarian cancer had come from studies of the older formulations containing higher doses of oestrogen and older progestogens. This study has shown that the same benefit attends the use of modern COCPs with their lower oestrogen dose and newer progestogens.

The study authors conclude: 'Based on results from our prospective study, contemporary combined oral contraceptives are still associated with a reduced risk of ovarian cancer in women of reproductive age, with patterns similar to those seen with older combined oral products. The reduced risk seems to persist after stopping use, although it is not yet known how long for.'

'Presently there is insufficient evidence to suggest similar protection among exclusive users of progestogen-only products,' they add.

Ovarian cancer typically presents late with five-year survival rates of 30-40%. Users of COCPs will be reassured to know that their personal risk of the disease is reduced while they remain users and for some years afterwards.

However, ovarian cancer rates rise with age and it is more common after the menopause. Most women use hormonal contraception at a time in their lives when their ovarian cancer risk is relatively low. Whether women retain some protection against ovarian cancer after the menopause and beyond is not known.

REFERENCE
1 Iversen L, Fielding S, Lidegaard Ø et al. Association between contemporary hormonal contraception and ovarian cancer in women of reproductive age in Denmark: prospective, nationwide cohort study. *BMJ* 2018;362:k3609

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