
Following recent reports from the International Agency for Research on Cancer (IARC), concern has been raised regarding the possible increased risk of various cancers relating to usage of the oral contraceptive (OC) pill. This large cohort study, leading on from previous reports from the Oxford Family Planning Association (FPA), set out to truly answer this question. Particular attention was focused on breast, cervical, uterine body and ovarian cancers and the potential confounding factors on the latter two.

The study recruited and annually followed up women who attended UK family planning clinics from 1968 to 1984. The women were all married, aged 15–49 years and all used OC pills. The investigators used the national death registrations and national hospital discharge data as the basis for their source population and linked together with the OC pill use by using the unique personal numbers that each person in the UK is allocated.

A total of 10,1101 postmenopausal women from the Oxford Family Planning Association were compared to 170,417,320 women from the whole of England and Wales, 1968–1983. Both groups were comparable on a number of variables. The major findings of the study were:

- The relative risk (RR) of non-gynaecological cancers, including breast, cervical, uterine body and ovarian cancers and cardiovascular disease (CVD), was increased in women who used OCs. The increase was strongest with the uterus body cancer regardless of the length since cessation and still 4.6 after 8 years. A strongly protective effect some 20 years after cessation was observed with a RR of 5.2 seen at 4 years after cessation.
- The nil effect seen on breast cancer and slightly protective effect on cervical cancer and no correlation was shown. Of particular note is the potential beneficial effects on the latter two.

The study was reviewed by Eva Jungmann, MBChB, MS, Consultant Physician at the Royal Infirmary of Edinburgh, Edinburgh, UK

In summary, the RUTH trial confirms the benefits of SERMs in the reduction of invasive breast cancer and vertebral fractures compared to placebo. Raloxifene in comparison to tamoxifen, does not increase endometrial pathology (confirmed in the MORE trial). Unfortunately these benefits have to be balanced against the increased risk of VTE and fatal stroke. Contrary to the initial trial design, a reduction in coronary events was not observed and therefore a cardio-protective effect cannot be assumed. Finally, the RUTH trial in comparison to the Women’s Health Initiative trial did not include a “global index”; the risks and benefits of SERM therapy should therefore be tailored to the individual needs of postmenopausal women.

References

Reviewed by Anja Guttinger

Subspecialty Trainee, Sexual and Reproductive Health, Family Planning and Well Woman Services, Dean Terrace Clinic, Edinburgh, UK

©FFPRHC J Fam Plann Reprod Health Care 2007; 33(1)