

FSRH response to new study on use of combined and progestogen-only hormonal contraception and breast cancer risk

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Background

To date there has been limited data on the risk of breast cancer among current and recent users of progestogen-only contraceptive (POC) methods, i.e., the progestogen-only pill, progestogen-only injectable, progestogen-only implant and the hormonal intra-uterine device (IUD). Previous studies on breast cancer risk among progestogen-only contraceptive users have been inconsistent, with some suggesting a slight increased risk of breast cancer and some indicating no increase.

There has been more robust evidence on which to base guidance about the risk of breast cancer among current and recent users of combined hormonal contraception (CHC). In the case of CHC, FSRH CEU recommends that women should be advised that current use of CHC¹ is associated with a small increased risk of breast cancer which reduces with time after stopping CHC.

New evidence

A new observational study by Fitzpatrick, et al., published in PLOS Medicine² investigated the association between current or recent use of combined oral and progestogen-only hormonal contraception and breast cancer risk. The study focussed on the progestogen-only contraceptive methods, in particular, due to their increasing use in the UK and other settings and the limited information available at present as to whether use of these methods affects breast cancer risk. Fitzpatrick, et al., demonstrated a slight (20-30%) elevated risk of incidents of breast cancer in women <50 years of age who currently use or have recently used progestogen-only contraceptives. The magnitude of this increase in risk was small and similar across all the types of progestogen-only methods studied (i.e., oral pill, injectable, implant and hormonal IUD). It was also similar to the increased risk found in this same study for combined (estrogen + progestogen) oral contraception and to what has been previously documented for CHC methods. The researchers also combined their new data on progestogen-only oral contraceptive use and breast cancer risk with data from previous studies of the topic and, from this combined meta-analysis, drew similar conclusions about there being a slightly increased breast cancer risk with progestogen-only oral contraceptive use.

In addition to showing this slight increase in breast cancer risk among individual users of any POC, the study also showed that after 5 years of use of either combined oral or any form of progestogen-only contraception, the associated 15-year absolute excess incidence of breast cancer in high-income countries (meaning the number of extra breast-cancer cases for every 100,000 women on the method) was estimated at 8 cases per 100,000 users at age 16-20 years and 265 cases per 100,000 users at age 35-39 years.

This large and well-conducted observational study, and accompanying meta-analysis, help us to better understand the relationship between progestogen-only contraceptive use and breast cancer risk. Based on these new data, it is possible that use of progestogen-only contraception does slightly increase breast cancer risk among current and recent users. However, breast cancer is relatively rare among younger

women -- those in the age groups most likely to be using these methods of contraception -- so the 20-30% increases in relative risk with POC use observed in this study equate to very small increases in a woman's absolute risk of developing breast cancer. This means that even with the slight increased risk observed by Fitzpatrick, et al., users and potential users of POC can be reassured that the chances of developing breast cancer as a result of their contraceptive use remain small.

Additionally, any small increase in breast cancer risk to an individual using a progestogen-only contraceptive needs to be weighed against the very significant benefit of achieving effective contraception to avoid unplanned pregnancy and the other non-contraceptive benefits of progestogen-only contraceptive use, including possible decreases in risk of ovarian and endometrial cancers.

How does this affect practice?

The FSRH CEU recommends no significant change to current practice at this time but does suggest that this information is included in individual discussions with patients regarding risks and benefits of various contraceptive methods.

Conclusion

The findings of this single observational study and meta-analysis suggest that current or recent use of progestogen-only contraceptives may confer a slight increase in breast cancer risk, and that the magnitude of this increased breast cancer risk is small and similar to what is documented for current or recent use of combined hormonal contraception. This study enhances the previously limited available evidence on this important topic. The FSRH CEU will review all FSRH CEU guidance documents and amend recommendations where appropriate.

References

1. Faculty of Sexual & Reproductive Healthcare (FSRH). Combined Hormonal Contraception. 2019. <https://www.fsrh.org/standards-and-guidance/documents/combined-hormonal-contraception/>
2. Fitzpatrick D, Pirie K, Reeves G, Green J, Beral V (2023) Combined and progestagen-only hormonal contraceptives and breast cancer risk: A UK nested case-control study and meta-analysis. PLoS Med 20(3): e1004188.

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