FSRH
Clinical Effectiveness Unit

The Faculty of Sexual & Reproductive Healthcare of the Royal College of Obstetricians & Gynaecologists

Statement from the Clinical Effectiveness Unit

Use of double dose (3mg) levonorgestrel emergency contraception by women taking enzyme-inducing medications

2nd July 2016

The European Medicines Agency has recommended that the dose of levonorgestrel emergency contraception (LNG-EC) should be doubled to 3mg if a woman is taking a medication that induces hepatic enzymes (and for four weeks after discontinuation of an enzyme-inducing medication).[1,2] This is in line with current FSRH guidelines and the British National Formulary (BNF) [3,4]

Metabolism of LNG is increased by enzyme-inducing medications. Plasma LNG levels after administration of LNG-EC have been demonstrated to be significantly lower in women taking enzyme inducers. This may result in a reduction in the effectiveness of LNG-EC [5].

The effectiveness of 3mg LNG-EC in women taking enzyme-inducing medications has not been studied. However no concerns are identified relating to safety or significant side effects associated with use of 3mg LNG. The CEU reminds clinicians that the copper IUD (Cu-IUD) is the most effective method of emergency contraception (EC), with a failure rate of about 0.1%.[6,7] The Cu-IUD is unaffected by enzyme-inducing medications and should be considered the first line recommendation for EC. The Cu-IUD can be inserted for EC within five days of the first unprotected intercourse in a menstrual cycle, or within 5 days of the earliest likely date of ovulation (whichever is later). The Cu-IUD provides effective ongoing contraception.

If a Cu-IUD is not acceptable to a woman or the above criteria for Cu-IUD insertion are not met, a woman taking an enzyme-inducing medication can be offered 3mg LNG-EC. Use of ulipristal acetate EC is not recommended for women using enzyme inducers [5].

The importance of effective ongoing contraception should be discussed with all women attending for EC. The effectiveness of oral contraceptives and the progestogen-only implant is reduced by enzyme-inducing medications. The progestogen-only injectable, the Cu-IUD and the levonorgestrel-releasing intrauterine system are suitable, effective contraceptive options.

References

1. European Medicines Agency (EMA). Questions and answers on Levonelle and associated names (levonorgestrel, 1500 microgram tablets). Outcome of a procedure under Article 13 of Regulation (EC) 1234/2008. 27 May 2016. http://www.ema.europa.eu/docs/en_GB/document_library/Referrals_document/Levonelle_13/WC500207294.pdf (accessed 01 July 2016)

FSRH – CEU Chalmers Centre 2A Chalmers Street Edinburgh EH3 9ES +44 (0)131 536 3830
CEU.Chalmers@nhslothian.scot.nhs.uk www.fsrh.org

FSRH registered office: 27 Sussex Place, London NW1 4RG Company No. 02804213 Charity No: 1019969

2. EMA. Amendments to the relevant sections of the Product information as approved by the CHMP on 26 May 2016, pending endorsement by the European Commission. Annex III: Amendments to the relevant sections of the Product Information. http://www.ema.europa.eu/docs/en_GB/document_library/Referrals_document/Levonelle_13/WC500207293.pdf (accessed 02 July 2016)
3. Faculty of Sexual and Reproductive Healthcare. Emergency Contraception. 2012. https://www.fsrh.org/documents/ceu-emergency-contraception-jan-2012/ (accessed 02 July 2016)
4. British National Formulary. Emergency Contraception: Hormonal Methods. 2014. https://www.evidence.nhs.uk/formulary/bnf/current/7-obstetrics-gynaecology-and-urinary-tract-disorders/73-contraceptives/735-emergency-contraception/hormonal-methods (accessed 02 July 2016)
5. electronic Medicines Compendium (eMC). Bayer PLC. Summary of Product Characteristics: Levonelle 1500 microgram tablet. 20 Oct 2014. http://www.medicines.org.uk/emc/medicine/16887 (accessed 02 July 2016)
6. Cheng L, Che Y, Gülmezoglu AM. Interventions for emergency contraception. *Cochrane Database Syst Rev* 2012; **8**: CD001324.
7. Cleland K, Zhu H, Goldstuck N, *et al.* The efficacy of intrauterine devices for emergency contraception: a systematic review of 35 years of experience. *Hum Reprod* 2012; **27**: 1994–2000.