



EMERGENCY CONTRACEPTION GUIDELINES

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- A woman's fertile period is considered to be the six consecutive days ending with (and including) the day of ovulation
- In the days immediately prior to ovulation and on the day of ovulation itself, pregnancy risk following a single episode of UPSI (Unprotected Sexual Intercourse) has been estimated to be up to 30%
- Estimation of the timing of ovulation using the usual cycle length and date of last menstrual period (LMP) reported by women is imprecise. It cannot be relied upon when assessing risk of pregnancy and therefore EC should be offered if UPSI occurs on any day in a natural cycle if a woman wishes to avoid pregnancy



INDICATIONS FOR EMERGENCY CONTRACEPTION (EC)

Women who do not wish to conceive should be offered EC after UPSI:

1. on any day of a natural menstrual cycle
2. from Day 21 after childbirth (unless criteria for lactational amenorrhoea is met)
3. from Day 5 after abortion, miscarriage, ectopic or uterine evacuation for gestational trophoblastic disease
4. if their regular contraception is compromised or used incorrectly



METHODS OF EC AVAILABLE

- Copper intrauterine device (Cu-IUD)
- Levonorgestrel oral EC (LNG-EC)
- Ulipristal acetate oral EC (UPA-EC)



RESPONSIBILITIES OF EC PROVIDERS

- If unable to provide all EC methods, inform and signpost patients to other services as necessary. **If a woman is referred for a Cu-IUD, oral EC should be given at time of referral in case it cannot be inserted or the woman changes her mind**
- Advise women that oral EC methods do not provide contraceptive cover for subsequent UPSI, so they need to use contraception or abstain from sex to avoid further risk of pregnancy
- Assess all women requesting EC regarding their risk for sexually transmitted infections (STI) and test appropriately
- Offer Quickstart hormonal contraception and arrange follow up pregnancy testing



COPPER INTRAUTERINE DEVICE (Cu-IUD)

- Most effective method of EC – a 2012 systematic review reported an overall pregnancy rate of <0.1%
- The primary mechanism of action of the Cu-IUD is inhibition of fertilisation by its toxic effect on sperm and ova
- If fertilisation does occur, the local endometrial inflammatory reaction resulting from the presence of the Cu-IUD prevents implantation
- Can be inserted up to 5 days after UPSI in a natural menstrual cycle or up to 5 days after the earliest likely date of ovulation (whichever is later)



- Only EC method that is effective after ovulation (it is inserted well before the likely earliest date implantation so it does not interrupt a pregnancy that has already implanted)
- Effectiveness is not known to be affected by weight/BMI or use of drugs/medication
- Provides effective ongoing contraception. If inserted when a woman is aged >40 years, a Cu-IUD will be effective for contraception until after the menopause



- Contraindications to insertion are the same as for routine IUD insertion.
- Risk of STI, previous ectopic pregnancy, young age and nulliparity are not contraindications to use. Adolescents who need EC should be offered all methods including the Cu-IUD
- Cu-IUD insertion is relatively contraindicated between 48 hours and 28 days after childbirth
- Breastfeeding women have a higher relative risk of uterine perforation during insertion than non-breastfeeding women. Absolute risk is low



LEVONORGESTREL EC (LNG-EC)

- Studies report the overall pregnancy rate amongst women taking LNG-EC within 72 hours of UPSI to be about 0.6–2.6% (LNG-EC was taken at any time of the cycle; UPSI may or may not have occurred when women were at risk of pregnancy)
- LNG-EC inhibits ovulation, delaying or preventing follicular rupture and causing luteal dysfunction. If taken prior to the start of the LH surge, LNG inhibits ovulation for the next 5 days, until sperm from the UPSI for which it was taken are no longer viable
- Licensed for EC up to 72 hours after UPSI as a 1.5mg dose. Off-licence use up to 96 hours is common practice. It is ineffective if taken more than 96 hours after UPSI



- If vomiting occurs within 3 hours of taking oral EC, a repeat dose should be given
- Side effects of oral EC include headache, nausea, abdominal or pelvic pain and delayed menstruation
- The majority of women menstruate within 7 days of the expected time after LNG-EC. Menstruation is delayed for over 7 days in fewer than 10% of women
- Pregnancy testing is advised if, after EC, the next menstrual period is delayed by more than 7 days, is lighter than usual or is associated with abdominal pain that is not typical of the woman's usual dysmenorrhoea



- LNG-EC administered after ovulation is ineffective
- It is possible that higher weight or BMI could reduce the effectiveness of oral EC, particularly LNG-EC (weight >70kg or BMI >26)
- Enzyme-inducing drugs could reduce the effectiveness of LNG-EC. A 3 mg dose of LNG-EC is advised but women should be informed that the effectiveness of this regimen is unknown.
- Available limited evidence indicates that LNG-EC has no adverse effects on breastfeeding or on breastfed infants



- UKMEC 2016 includes **no contraindications** to use of LNG-EC. The Summary of Product Characteristics (SPC) for Levonelle® states that it is not recommended in patients with severe hepatic dysfunction. However, pregnancy poses a significant risk in women with severe hepatic impairment and expert opinion suggests that use of a single dose of LNG 1.5 mg is therefore acceptable.
- LNG-EC does not provide ongoing contraception
- Suitable hormonal contraception (CHC, POP, IMP or DMPA) should be quick started immediately after LNG-EC with a pregnancy test 21 days later to exclude pregnancy resulting from LNG-EC failure



- LNG-EC can be offered to a woman if she has had UPSI earlier in the same cycle, as well as within the last 4 days, as LNG-EC does not disrupt an existing pregnancy and is not associated with fetal abnormality
- If a woman has already taken LNG-EC once or more in a cycle, EC providers can offer her LNG-EC again after further UPSI in the same cycle. There is evidence that oral EC does not cause abortion or harm to a very early pregnancy
- If a woman has already taken UPA-EC, LNG-EC should not be taken in the following 5 days



ULIPRISTAL ACETATE EC (UPA-EC)

- The overall pregnancy rate after administration of UPA-EC has been reported to be about 1–2%
- UPA-EC has been demonstrated to be effective for up to 120 hours after UPSI and has been demonstrated to be more effective than LNG-EC at a 30mg dose
- UPA is a selective progesterone receptor modulator. It acts by delaying ovulation for at least 5 days, until sperm from the UPSI for which EC was taken are no longer viable
- UPA-EC delays ovulation even after the start of the luteinising hormone (LH) surge whereas LNG-EC is no longer effective after the start of the LH surge. UPA-EC cannot inhibit ovulation at or after the LH peak



- Enzyme-inducing drugs could reduce the effectiveness of UPA-EC as well as higher weight/BMI, however, a double-dose of UPA-EC is not recommended
- The pharmacokinetics of lower doses of UPA taken for indications other than EC have been shown to be altered by the use of Esomeprazole. The effectiveness of UPA-EC in women using such medicines has not been studied. The SPC for ellaOne® (UPA 30 mg) advises that the clinical significance of this interaction for single-dose administration of UPA for EC is unknown



- UKMEC 2016 includes **no contraindications** to the use of UPA-EC.
- The SPC for ellaOne advises against use in women with severe asthma controlled with oral steroids because of the anti-glucocorticoid effect of UPA
- The SPC for ellaOne recommends that in the absence of safety data, UPA-EC should be avoided by women with hepatic impairment. However, pregnancy poses a significant risk in women with severe hepatic impairment and expert opinion suggests that use of a single dose of UPA 30 mg is therefore acceptable



- Breastfeeding women should be advised not to breastfeed and to express and discard milk for a week after they have taken UPA-EC
- Be aware that the effectiveness of UPA-EC could be reduced if a woman takes progestogen in the **5 days after** taking UPA-EC. Women should be advised to wait 5 days after taking UPA-EC before starting suitable hormonal contraception.
- Be aware that the effectiveness of UPA-EC could theoretically be reduced if a woman has taken progestogen in **the 7 days prior** to taking UPA-EC



- Consider UPA-EC as the first-line oral EC for a woman who has had UPSI 96–120 hours ago (even if she has also had UPSI within the last 96 hours).
- Consider UPA-EC as the first-line oral EC for a woman who has had UPSI within the last 5 days if the UPSI is likely to have taken place during the 5 days prior to the estimated day of ovulation (as risk of pregnancy is very high)
- UPA-EC can be offered to a woman if she has had UPSI earlier in the same cycle as well as within the last 5 days, as evidence suggests that UPA-EC does not disrupt an existing pregnancy and is not associated with fetal abnormality



- If a woman has already taken UPA-EC once or more in a cycle, UPA-EC can be offered again after further UPSI in the same cycle



SUMMARY

- Cu-IUD is the most effective EC and should be offered to all women including adolescents
- Oral EC methods may have their limitations but there are no absolute contraindications to use according to experts
- Both LNG-EC and UPA-EC can be used more than once in a cycle
- Several factors may influence which oral EC method to use inc:
 - 1. Time interval from UPSI** – after 96 hours LNG-EC is ineffective
 - 2. Risk of pregnancy from UPSI** – if in 5 days prior to ovulation then UPA would be advised over LNG-EC



3. Use of progestogen in previous 7 days e.g. If missed pills are cause of UPSI, UPA-EC may be ineffective

4. Risk of pregnancy from delaying starting ongoing contraception. UPA-EC requires starting hormonal contraception to be delayed by 5 days whereas women can start hormonal contraception immediately after LNG-EC

5. Body weight/BMI There is some evidence to suggest that higher weight/BMI has a lesser effect on UPA-EC so it should be considered or double dose LNG-EC

6. Enzyme-inducing drugs effectiveness of UPA-EC and LNG-EC could be reduced. LNG-EC needs to be given as a double dose



REFERENCES

- [FSRH March 2017 Emergency Contraception Guidelines](#)

