SRH clinical consultations: emergency contraception

Key messages

1. Emergency Cu-IUDs are more effective than oral emergency contraception and should be offered to eligible patients.

2. Emergency Cu-IUDs can be fitted up to 5 days after unprotected sex or up to 5 days after earliest likely ovulation.

3. Converting dates of last menstrual period (LMP,) earliest likely ovulation and time/s of unprotected sex into 'days in the cycle' and drawing a timeline helps when assessing pregnancy risk and deciding which emergency contraception methods can be offered.

Clinical Case

Jaz, 28, works as a marketing manager for a clothing company. It's her day off and she attends the walk-in service at her local sexual health clinic on a Monday morning. She requests emergency contraception (EC). She normally uses condoms with her partner of 6 months but didn't use one when she had sex last Wednesday (5 days ago). The app Jaz uses to track her period tells her that her last period started 17 days ago. This was a normal period for her – heavy and painful for 2 days and lasting 7 days. Her app shows her cycles vary between 28 and 31 days. When asked, Jaz remembers she also had sex without a condom the Thursday before last (11 days ago).

Jaz suffers from migraines with aura and believes she cannot use any hormonal or long-acting contraception.

Jaz has no (other) past medical or surgical history, no allergies to medication and no significant family history. She had a normal cervical screening test 2 years ago and an STI screen 1 month ago. Neither Jaz nor her partner have had sex with anyone else since.

Background

There are three methods of EC available in the UK, two oral methods – one containing Levonorgestrel (LNG-EC) and one containing Ulipristal Acetate (UPA-EC) – and the copper IUD (Cu-IUD).

Oral EC works by delaying ovulation by 5 days or more. LNG-EC is licensed for use up to 72 hours after unprotected sex, while UPA-EC is licensed for use up to 120 hours after unprotected sex. Evidence suggests that oral EC administered after ovulation has occurred is ineffective.

Evidence also suggests that neither UPA nor LNG disrupt an existing pregnancy and are not associated with fetal anomaly. Therefore, both methods of oral EC can be given when there's an earlier pregnancy risk within the current menstrual cycle. Both oral EC methods can also be taken more than once per cycle, although the same type of EC should be given if required within the next 5-7 days to avoid potential interactions between UPA and LNG.

Emergency Cu-IUDs work by preventing fertilisation or implantation, depending on when in the menstrual cycle they are inserted. Cu-IUDs can be fitted up to 5 days after earliest likely ovulation, or up to 5 days after unprotected sex. Earliest likely ovulation is worked out by subtracting 14 days (length of luteal phase) from the shortest cycle length. Therefore, in a 28–31-day cycle earliest likely

ovulation is day 14 of the cycle (28 minus 14). A 2002 UK Judicial Review established that pregnancy begins at implantation, therefore emergency Cu-IUDs are not an abortifacient.

Cu-IUDs are more effective than oral EC and should always be offered to eligible patients (see Supplemental Figure 1: Emergency contraception effectiveness). If a service cannot offer an emergency IUD, patients should be signposted to services that can provide them and offered oral EC in case the Cu-IUD cannot be inserted or the individual changes their mind.[1]

It is important to be able to explain the advantages and disadvantages of each EC method to patients (see Supplemental Figures 2 and 3 on the advantages and disadvantages of EC methods).[2]

Assessing pregnancy risk and deciding which EC method can be offered

Five key pieces of information are required:

1. Contraception use
2. Recent medication use (especially oral EC)
3. Last menstrual period (LMP)
4. Regularity of cycle and shortest cycle length (so that earliest likely ovulation can be worked out)
5. Dates of unprotected sex (UPSI) since LMP

Jaz uses condoms for contraception, is on no medication and has not used EC before. Her LMP was 17 days ago, and she had unprotected sex 5 and 11 days ago. Her shortest cycle length is 28 days, therefore, earliest likely ovulation is day 14 of her cycle (28 minus 14).

This is a lot of information! The easiest way to work out if there is a pregnancy risk and which EC method can be offered is to convert the information into 'days in the cycle' and draw a timeline with LMP as day 1. Then mark the episodes of unprotected sex, earliest ovulation and the day in her cycle today falls on. This makes it much easier to work out if there is a pregnancy risk, (i.e., is it likely that sperm, which can survive for 5 days in the uterus/fallopian tubes, meets an egg) and work out which methods of EC can be offered.

Convert information to days in the menstrual cycle (see Table 1).

Information needed	Jaz's information	Day/s in the cycle
LMP	17 days ago	Day 18 today
Earliest likely ovulation	Shortest cycle length 28 days	Day 14 (18 minus 14)
UPSI	5 and 11 days ago	Days 7 and 13

Table 1 Converting information to days of the menstrual cycle

Draw a timeline and insert the above information (see Figure 1).

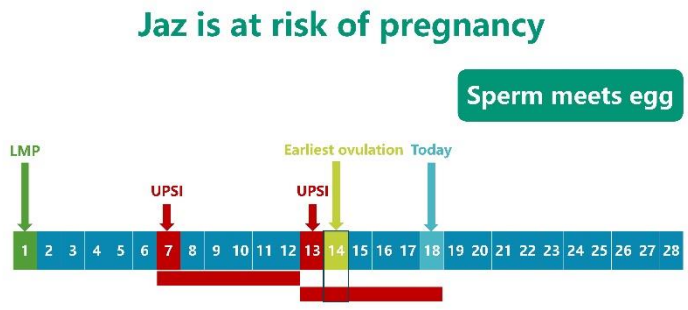

Figure 1 Timeline of Jaz's information

Offering suitable EC methods

Jaz should be offered a Cu-IUD, as it is the most effective form of EC and it's unlikely oral EC would work as she's already ovulated. The IUD would need to be fitted today or tomorrow. Any later and she would be past earliest likely ovulation plus 5 days (day 19).

If Jaz declined a Cu-IUD she could take UPA-EC, as her last UPSI was 5 days ago. However, it would be important to emphasise that this is unlikely to be effective as oral EC works by delaying ovulation and she has most likely already ovulated. The importance of doing a pregnancy test in 3 weeks if she hasn't had a normal period by then would need to be emphasised. She would also need to be warned to wait 5 days before starting any hormonal contraception.

Outcome

Jaz opts to have a Cu-UD fitted. The healthcare provider (HCP) explains how the IUD works, its efficacy and the risks and benefits, including that she can use it as ongoing contraception for 10 years if she wishes. The HCP also explains what fitting the IUD will entail.[3, 4]

Jaz's periods are normally quite heavy and she's not sure she will keep the IUD if her periods get any heavier. The HCP explains that she can have it removed at any time after her next period and discusses other potential methods of contraception, reassuring her that her migraines with aura do not mean that she cannot use progestogen-only and long-acting methods of contraception. The HCP gives Jaz QR code (see Figure 5) to access the RCOG's *Overview of contraceptive methods* infographic to look at while she is waiting for her IUD fitting (see Supplemental Figure 4: QR code for RCOG's Overview of contraceptive methods infographic).[5]

References

1. Faculty of Sexual and Reproductive Healthcare. *Clinical Guideline: Intrauterine Contraception*. Available: https://www.fsrh.org/standards-and-guidance/documents/ceuguidanceintrauterinecontraception/
2. University College London. *Contraception choices.* Available: https://www.contraceptionchoices.org/emergency-contraception
3. Lothian Sexual Health. *The coil (IUD/IUS).* Available https://www.lothiansexualhealth.scot/contraception/iud-ius/
4. Central and North West London NHS Foundation Trust*. Information about intrauterine contraception.* Available https://www.sexualhealth.cnwl.nhs.uk/information-about-intrauterine-contraception/
5. Royal College of Obstetricians and Gynaecologists. *Overview of contraceptive methods* infographic. Available: https://www.rcog.org.uk/media/un4pxbiw/rcog-bpp-post-abortion-contraception-infographic-only-web_.pdf.