

Emergency Contraception

Information for Health Professionals

Emergency contraception can be used to reduce the risk of pregnancy after unprotected sex.

Health professionals have a major role in facilitating early access to emergency contraception (EC) to maximise its chance of effectiveness. Information and education about the method should be raised opportunistically in a range of reproductive, contraceptive and sexual health consultations. Research overseas has found that easy access to emergency contraception including keeping an emergency script or supply at home does not decrease the use of regular contraceptive methods.³

Emergency contraception can be used following sexual contact where there is a risk of an unintended pregnancy. Indications include:

- unprotected intercourse
- failure of a barrier method
- sexual assault
- potential pill failures
- recent use of suspected teratogens

Oral steroid emergency contraception

Levonorgestrel-only method

Levonorgestrel-only emergency contraception should be used as the method of choice unless a woman is considering insertion of an IUCD. A recent study has shown that this method is highly effective and has minimal side effects.¹

Dose: Two doses of levonorgestrel 750 ug taken 12 hours apart.

- Postinor-2 one tablet and another tablet 12 hours later;
- Microlut or Microval twenty-five (25) tablets and twenty-five (25) tablets 12 hours later.

Postinor-2 has TGA approval for use as an emergency contraceptive in Australia.

Combined oestrogen-progestogen method

The combined oestrogen-progestogen regimen commonly referred to as the Yuzpe method is no longer commonly used as an emergency contraception method as it is less effective and has

more side effects compared to the levonorgestrel method.¹

It can be used if other methods are not readily accessible; eg if it is difficult for the woman to obtain a prescription or supply of the levonorgestrel method, but she has a supply of suitable combined oral contraceptive pills at home.

Dose: Two doses of 100ug ethinyl estradiol and 500ug levonorgestrel taken 12 hours apart.

- 4 tablets stat of Nordette or Microgynon 30 (or generic equivalent) and another 4 tablets 12 hours later.

As nausea and vomiting are very common with the Yuzpe method, an anti emetic, to be taken 30-60 minutes prior to the hormonal doses, should be supplied/prescribed with this regimen.

Both levonorgestrel and Yuzpe methods have been shown to be most effective when commenced within 12-24 hours of sexual intercourse, with commencement of the first dose recommended before 72 hours.¹

A recent study, using the Yuzpe regimen, found that emergency contraception may still be effective (though to a lesser degree) in preventing pregnancy, when commenced up to 120 hours after intercourse.²

Mechanism of action

The exact mechanism of action for emergency contraception methods is not well understood. Hormonal methods are thought to prevent or delay ovulation. They may also interfere with ovum and sperm transport, fertilisation and implantation.⁴

There is no evidence that emergency contraceptive pills act to disrupt an implanted pregnancy.

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Effectiveness

The average risk of pregnancy from midcycle intercourse is 20% to 30%. Pregnancy rates of less than 3% have been recorded with both hormonal methods when commenced within 72 hours of unprotected sex.

- Recent evidence suggests that the efficacy of both hormonal methods is greater the earlier after exposure the first dose is given.¹
- With the levonorgestrel method, the rate of pregnancy is 0.4% if started within 24 hours and 2.7% if started within 72 hours. The rates for the Yuzpe method are 2% and 4.7% respectively.¹
- There is no day after the stated last menstrual period for which a clinician can be sure that unprotected sexual intercourse does not carry a risk of conception. In a 28 day cycle, days 8-18 carry a higher risk of conception.

Contraindications

The World Health Organisation and the International Planned Parenthood Federation have stated that there are no known contraindications to the use of hormonal emergency contraception, so there is no need for a medical history or physical examination before providing it.⁵

Side effects

Nausea, vomiting, dizziness and fatigue are the commonest side effects of emergency oral steroid contraception. The incidence of these is significantly lower with the levonorgestrel-only method.¹

- Less common side effects including headache, breast tenderness and lower abdominal pain can occur with this method.¹
- No adverse effects on foetal development have been reported with the method in cases where pregnancy has occurred.

Frequency of Use

- Emergency contraceptive pills (ECP) should not replace the use of regular contraception, as the

cumulative pregnancy rate for frequent use of ECP is higher than with regular contraception. However, if unprotected sex occurs in a cycle where the ECP has already been used it can be used again.

- Women should understand that the use of the ECP cannot protect them from the possibility of pregnancy if unprotected intercourse occurs later in the cycle.
- In cycles, where unprotected intercourse has occurred more than once, ECP can be used, although efficacy will be influenced by the time interval since the first act of unprotected intercourse. The woman must understand that, if a pregnancy has already occurred, the ECP will not be effective.

Drug interactions

Hepatic enzyme inducing drugs

Hepatic enzyme inducing drugs enhance the metabolism of levonorgestrel and ethinyl estradiol. If a woman taking these drugs (e.g. phenytoin, carbamazepine, rifampicin, griseofulvin) uses emergency hormonal contraception the recommendation is to double each dose. This increases the risk of side effects.^{6,7,10}

Antibiotics

Antibiotics taken concurrently with hormonal emergency contraception are unlikely to alter its efficacy and no alteration in dose is advised. The exceptions are the enzyme inducers rifampicin and griseofulvin as detailed above.^{6,7,10}

Follow up

- Women should be advised that, after hormonal emergency contraception, their menstrual period should occur within one week before or after the expected time. If menstruation is delayed for more than one week or if it is much lighter than normal, emergency contraception may have failed and the woman should have a pregnancy test.⁵
- Emergency contraception is not intended to induce a withdrawal bleed.

- The woman must be advised to return if the bleed is significantly different from her usual menstrual bleed. This includes light or intermittent bleeding or bleeding delayed by more than a week.
- There is no protection from pregnancy after postcoital hormonal therapy so abstinence from intercourse or barriers should be strongly advised until ongoing contraception has taken effect.
- Oral contraception can be started immediately or with the next menstruation. If oral contraception is started immediately it is not considered to be effective until 7 hormone pills have been taken. ***In this situation careful follow up to exclude pregnancy is advised.***
- If a woman has forgotten oral contraceptive pills and is using postcoital steroidal contraception, she can continue her oral contraceptive pill. She is not considered to be safe until 7 hormone pills have been taken.

Emergency contraception for potential pill failures

Missed combined pill mid-packet.

When active pill taking has been established for seven consecutive days contraceptive protection will only be lost if 7 active pills are missed. Postcoital contraception would be over-treatment when 1-3 pills are missed mid-packet.^{10,7} Emergency contraception may be justified empirically where there is a high level of anxiety.

Prolonged pill free interval.

The pill free interval is considered prolonged when active pills are missed either from the first and or last week of the packet. A careful history of all missed pills should be taken in order to calculate the length of the pill free interval.

Emergency contraception may be indicated when the pill free interval is extended to eight or more days. This would include missing one or more of the first or last seven pills in any combination.

Missed progestogen-only pill.

Emergency contraception may be indicated if unprotected intercourse takes place at any time from the time of the first missed or late pill (ie. pill taking delayed by more than three hours) to 48 hours after pill taking is resumed.

Women who present for emergency contraception have had unprotected intercourse and may be at risk of acquiring a sexually transmitted infection. It is important to assess the STI risk and manage accordingly.

Copper Bearing IUCDs

Copper bearing IUCDs provide an effective method of postcoital contraception. The failure rate is less than 1%.¹⁰ Careful assessment and counselling should take place before insertion is decided upon. The IUCD is not suitable for women who have risk factors for pelvic inflammatory disease.

An emergency IUCD can be inserted at any time in the cycle provided the earliest episode of unprotected intercourse occurred no more than 5 days previously. Where the earliest episode of unprotected intercourse was more than 5 days previously, an IUCD can be considered up to 5 days after the calculated earliest day of ovulation (ie. up to day 19 of a 28 day shortest cycle by history). This limit is well within the period before implantation.^{6,7} If the woman does not wish to continue using the IUCD as a contraceptive method, it may be removed at the time of the next period. If hormonal contraception has been commenced, the IUCD may be removed after 7 active pills have been taken.

Breastfeeding and emergency contraception

Fully breastfeeding women who are amenorrhoeic (no vaginal bleeding after 56 days postpartum), have a negligible risk of pregnancy in the first 6 months postpartum.⁸ If a breastfeeding woman taking the progestogen-only pill misses a single pill, the risk of pregnancy is very low particularly if she is amenorrhoeic.

The progestogen-only regimen or IUCD are the only suitable alternatives for breastfeeding women who require emergency contraception.

Future Developments

A single dose of 10 mg RU486 (mifepristone) used within 72 hours of unprotected intercourse has been shown to be highly effective in protecting against pregnancy with fewer side effects than the other hormonal methods.⁹ RU486 is not available in Australia at present.

Further Reading:

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