Levonorgestrel for emergency contraception

Emergency contraception refers to back-up methods for contraceptive emergencies which women can use within the first few days after unprotected intercourse to prevent an unwanted pregnancy. Emergency contraceptives are not suitable for regular use.

The WHO-recommended regimen for emergency contraception is:
- 1.5 mg levonorgestrel as a single dose.

Who needs emergency contraception?
Any woman of reproductive age may need emergency contraception at some point to avoid an unwanted pregnancy. It is meant to be used in situations such as:
- when no contraceptive has been used;
- when there is a contraceptive failure or incorrect use, including:
  - condom breakage, slippage, or incorrect use
  - three or more consecutive missed combined oral contraceptive pills
  - progestogen-only pill (minipill) taken more than three hours late
  - more than two weeks late for a progestogen-only contraceptive injection (depot-medroxyprogesterone acetate or norethisterone enanthate)
  - more than seven days late for a combined estrogen-plus-progestogen monthly injection
  - dislodgment, delay in placing, or early removal of a contraceptive hormonal skin patch or ring

- dislodgment, breakage, tearing, or early removal of a diaphragm or cervical cap
- failed coitus interruptus (e.g., ejaculation in vagina or on external genitalia)
- failure of a spermicide tablet or film to melt before intercourse
- miscalculation of the periodic abstinence method or failure to abstain on fertile day of cycle
- IUD expulsion;
- in cases of sexual assault when the woman was not protected by an effective contraceptive method.

Mode of action
Levonorgestrel emergency contraceptive pills (ECPs) have been shown to prevent ovulation and they did not have any detectable effect on the endometrium (uterine lining) or progesterone levels when given after ovulation. ECPs are not effective once the process of implantation has begun, and will not cause abortion.

Effectiveness
Based on reports from four studies including almost 5000 women, the levonorgestrel regimen used within 5 days after unprotected intercourse reduced a woman’s chance of pregnancy by 60-90 per cent. The regimen is more effective the sooner after intercourse it is taken.
Medical eligibility criteria

Emergency contraceptive pills prevent pregnancy. They should not be given to a woman who already has a confirmed pregnancy. However, if a woman inadvertently takes the pills after she became pregnant, the limited available evidence suggests that the pills will not harm either the mother or her fetus.

Emergency contraceptive pills are for emergency use only and not appropriate for regular use as an ongoing contraceptive method because of the higher possibility of failure compared to modern contraceptives. In addition, frequent use of emergency contraception results in more side-effects, such as menstrual irregularities. However, their repeated use poses no known health risks.

Further reading


3. Croxatto HB, Brache V, Ravez M et al. Pituitary-ovarian function following the standard levonorgestrel emergency contraceptive dose or a single 0.75 mg dose given on the days preceding ovulation. Contraception, 2004;70:442–50.


