Clinical Summary: Emergency Contraceptive Pills

Indications: Emergency contraceptive pills (ECPs) are indicated to prevent pregnancy after sexual intercourse if no contraceptive was used, if a contraceptive was used incorrectly, or if a contraceptive was used correctly but was immediately observed to have failed.

ECP regimens: The two primary ECP regimens, packaged and labeled specifically for emergency contraception (EC), are:
- 1 tablet of levonorgestrel (LNG) 1.5 mg (also presented as 2 tablets of LNG 0.75 mg each, which can safely be taken together)
- 1 tablet of ulipristal acetate (UPA) 30 mg

Other ECP regimens are:
- 1 tablet of mifepristone 10–25 mg (less widely available)
- The Yuzpe combined hormonal regimen: using certain types of regular birth control pills as EC

Regardless of the regimen used, ECPs should be taken as soon as possible, and no later than five days after sexual intercourse, to maximize use before ovulation occurs.

How ECPs work: The primary mechanism is disruption of ovulation. Other mechanisms have been postulated but are not well supported by data. No evidence supports the theory that ECPs interfere with the implantation of a fertilized egg. ECPs do not cause abortion of an existing pregnancy.

ECP effectiveness: The LNG regimen reduces pregnancy risk by at least half and possibly by as much as 80% to 90% for one act of unprotected intercourse. The UPA and mifepristone regimens are more effective than the LNG regimen. The Yuzpe regimen is the least effective.

Side effects: ECPs are safe, and there is no situation in which the risks of using any EC regimen outweigh the benefits. Side effects are minor and self-limiting and may include altered bleeding patterns, nausea, headache, abdominal pain, breast tenderness, dizziness, or fatigue.

Effects on pregnancy: ECPs are not harmful if inadvertently taken in pregnancy. If the woman became pregnant despite using ECPs, these will do no harm to her, her pregnancy, or the fetus.

Precautions and contraindications: ECPs have no medical contraindications. Women should not take ECPs if they are already pregnant because they will not work.

Clinical screening: No examinations or laboratory tests are needed before using ECPs.

Special issues:
- Adolescents: ECPs are safe for all women regardless of age and can be used by girls in beginning stages of puberty, before menarche.
- Breastfeeding: LNG ECPs can be used with no restrictions. If UPA ECPs are used, it is recommended to stop breastfeeding for one week.
- Use of ECPs before sex: ECPs could be an appropriate method for women with low coital frequency, but this warrants further study. If a woman has the opportunity to plan to use a contraceptive method before sex, a method other than ECPs, such as condoms or another barrier method, is recommended.
- Use after more than one episode of unprotected sexual intercourse: Women should use only one ECP treatment at a time regardless of the number of prior episodes of unprotected intercourse. If all episodes of unprotected intercourse were within the last 120 hours, using UPA ECPs is recommended. If all episodes took place within the last 72 hours, a woman can either use LNG or UPA ECPs.
- Repeated use: ECPs can be used as often as needed but do not need to be taken more than once every 24 hours if multiple episodes of unprotected intercourse occur within this timeframe. Using EC more than once in the same menstrual cycle is perfectly safe. Because UPA and LNG interact with one another, the same regimen that had already been used (whether LNG or UPA) should be repeated if EC is needed again within a five-day period.
• **Use of ECPs during the "non-fertile period"**: Determining with certainty whether intercourse had occurred on a fertile or non-fertile cycle day is often not possible. Thus, women should not refrain from using ECPs due to an assumption that a particular episode of unprotected intercourse may have occurred on a potential non-fertile day.

• **Drug interactions**: Inducers of hepatic CYP450 enzymes may reduce the effectiveness of LNG and UPA ECPs. These include the HIV medicines efavirenz and ritonavir, certain medicines for tuberculosis and epilepsy, and herbal medicines containing St. John’s wort. A woman using these drugs and in need of EC should be offered the Cu-IUD or, alternatively, a double dose of LNG (3 mg). In addition, the effectiveness of UPA ECPs could be reduced if progestogen was taken seven days prior or is taken within five days after UPA intake. Use of UPA ECPs is not recommended in women with severe asthma treated by oral glucocorticoid or in women with severe hepatic impairment.

• **Ectopic pregnancy**: No ECP regimen increases the risk that a pregnancy will be ectopic.

• **Obesity**: ECPs may be less effective among women with a body mass index (BMI) ≥30 kg/m² than among women with a BMI <25 kg/m². The Cu-IUD or the UPA regimen is recommended for obese-BMI women. Alternatively, a double dose of LNG can be considered. Women should never be denied access to ECPs due to higher weights or BMI.

**Service delivery systems**: All women, girls, and men should be informed about ECPs before the need arises. To ensure timely access, obtaining a package of ECPs or a prescription in advance of need should be considered.

**Providing ECPs**: With a variety of EC methods increasingly available, women should be presented with thorough counseling information so they can choose the best EC method for them each time EC is needed. After EC use, no follow up is required.

**Starting or resuming regular contraceptives after ECPs use**: Women must be informed that they are at an increased risk of pregnancy after using ECPs if further episodes of unprotected intercourse take place in the same cycle and that ECPs will not provide contraception for subsequent unprotected intercourse. After using ECPs, a woman should use another contraceptive method before she resumes sexual activity.

- If she used LNG ECPs or the Yuzpe method, a barrier method or abstinence is advised for one week. Combined or progestogen-only hormonal contraceptive methods (pills, patches, injection, implants, ring) can be safely started or resumed on the same day of LNG ECP intake.
- If UPA ECPs were used, a barrier method or abstinence is advised for two weeks. Combined or progestogen-only hormonal contraceptive methods (pills, patches, injection, implants, ring), except the LNG Intrauterine System (LNG-IUS), can be safely started five full days after using UPA ECPs.

**If the user becomes pregnant**: A woman who used ECPs may subsequently learn that she is pregnant (because she may have already been pregnant; because the ECPs may have failed; or because subsequent unprotected intercourse may have taken place after using ECPs). In any case, she should be aware that ECPs have no known adverse effects on a pregnancy.