

Women's Health: Emergency contraception:

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The Case

- 19 yo F with no significant PMH presents for annual wellness exam
- No acute complaints
- Social Hx:
 - Sexually active in a monogamous relationship
 - Pregnancy is not currently desired
 - Her male partner uses condoms “most of the time”
 - She is uncertain of the date of her LMP
 - Has had sexual intercourse several times since her last menses, including unprotected intercourse 3 days ago

Next steps

- POC Urine Pregnancy Test: negative
- Should emergency contraception be prescribed?

What is EC?

- Methods used after unprotected intercourse to reduce the risk of pregnancy
- Not abortifacient
- If someone is already pregnant, EC is ineffective but will not harm the pregnancy

Indications for EC

Prevent an undesired pregnancy if:

- No contraceptive was used at the time of intercourse
- The patient's current contraceptive method failed:
 - Condoms
 - Coitus interruptus
 - Displaced IUD
 - Missed hormonal contraceptive
 - Delayed contraceptive use
 - Relying on breastfeeding for contraception

Options:

- IUDs:
 - Copper
 - 52 mg Levonorgestrel
- Oral formulations:
 - Ulipristal acetate
 - Levonorgestrel PO
 - Yuzpe method



MOA: IUD

- Copper IUD (Paragard)
 - Copper enhances the cytotoxic inflammatory response within the endometrium
 - Impairs sperm migration, viability, and acrosomal reaction
 - Impairs implantation
 - Pregnancy risk: 0.1%
 - Can be used up to 5 days
 - Highly effective at any time in the cycle, regardless of BMI
- Levonorgestrel 52 mg IUD (Mirena, Liletta)
 - Progestins thicken cervical mucus
 - Impair implantation and may inhibit the binding of the sperm and egg
 - Pregnancy risk: 0.3%
 - Can be used up to 5 days
 - Highly effective at any time in the cycle, regardless of BMI

MOA: oral medications

- Ulipristal acetate (Ella)
 - Selective progesterone receptor modulator
 - Prevents progestin from binding to the progesterone receptor → inhibits or delays ovulation
 - Effective until the LH peak
 - Unlikely to prevent implantation of a fertilized egg
 - Pregnancy risk: 1.1-2.6% throughout the 5 days
- Levonorgestrel PO (Plan B)
 - Blocks LH surge → inhibits follicular development and ovulation
 - Effective until LH surge begins
 - Not effective once implantation has begun
 - Pregnancy risk: 1.7-2.6%
 - Efficacy decreases over each of the 3 days

Side effects

- Copper IUD
 - Risk of uterine perforation of approximately 1/1,000
 - Associated with uterine cramping
 - Increased duration of menstrual flow or dysmenorrhea
- Levonorgestrel IUD
 - Abdominal or pelvic pain from insertion, bleeding, uterine perforation, or infection
 - Headache
 - Breast tenderness

- Ella & Plan B
 - Bleeding (up to 31%)
 - Nausea/vomiting (15%)
 - Abdominal pain (15%)
 - Headache (10%)



Does the patient prefer IUD or oral medication?

IUD

Medication

Pregnancy Test

Ulipristal acetate

Levonorgestrel

- Use for up to 5 days from UPI
- Preferred if BMI >30
- Requires prescription
- If hormonal contraception is desired, must wait 5 days

- Use for up to 3 days from UPI
- Available OTC
- If hormonal contraception is desired, can start immediately

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Counsel about pregnancy options

Copper

Levonorgestrel

- Lasts up to 10 years
- No hormones
- Can cause vaginal spotting

- Lasts up to 7 years
- Contains a progestin but no estrogen
- Causes lighter or no periods

Dose: 30 mg PO x 1 within 120 hours

Dose: 1.5 mg PO x 1 within 72 hours

Counseling:
- No back-up method needed
- Pregnancy test should be repeated if period does not occur within 3 weeks

Counseling:
- UPA: back-up method needed
- Plan B: can start hormonal contraceptive at the same time
- Pregnancy test should be repeated if period does not occur within 3 weeks

Barriers to Use

- Lack of awareness of EC – not much advertising
- Providers may not offer them
- Many ED's do not have EC readily available for victims of sexual assault
- Only Plan B is available OTC
- May not have IUD in stock in the clinic or may require prior authorization

Cost

Copper IUD	LNG IUD	Ella	Plan B
<ul style="list-style-type: none">• \$500 - \$739	<ul style="list-style-type: none">• \$500 - \$858	<ul style="list-style-type: none">• \$50 self-pay at pharmacy• \$67 online	<ul style="list-style-type: none">• \$40 to \$50 OTC• \$10 to \$25 online, though shipping necessitates advanced provision
<ul style="list-style-type: none">• Covered by insurance• High deductible can limit access• highest cost for uninsured	<ul style="list-style-type: none">• Covered by insurance• High deductible can limit access• highest cost for uninsured	<ul style="list-style-type: none">• Covered by insurance	<ul style="list-style-type: none">• Covered by insurance• Often prescribed at time of OCP rx

Counseling

- Fertility is not affected
- Will not interfere with an implanted fertilized egg
- Describe side effects
- May need a repeat pregnancy test if no menstrual period within 3-4 weeks
- If using LNG → can start hormonal LARC immediately
- If using Ulipristal Acetate (Ella) → must wait 5 days before starting a hormonal LARC
- No limit to the number of times or frequency an individual can use Plan B, however insurance only covers up to 6 per year
- If EC is needed for missed doses of hormonal contraceptive → can offer an alternative LARC