

# Hormonal Emergency Contraception: Adult & Pediatric

Reproductive Health

Clinical Decision Tools for RNs with Additional Authorized Practice [RN(AAP)s]

Effective Date: February 1, 2022

# **Background**

Hormonal emergency contraception (EC) is the use of progesterone medications to try to prevent pregnancy during a specific time after unprotected or inadequately protected intercourse (Raine, 2019). Hormonal emergency contraception is typically recommended within 120 hours or five days of unprotected or inadequately protected intercourse (Raine, 2019).

# **Immediate Consultation Requirements**

The RN(AAP) should seek immediate consultation from a physician/NP when any of the following circumstances exist:

- the client was a victim of sexual assault,
- the client presents for care after 120 hours or five days has elapsed,
- a pregnancy is confirmed and the client wants to discuss termination,
- the client has undiagnosed abnormal vaginal bleeding,
- the client has a hypersensitivity to any component of the drug(s) used for hormonal EC,
- the Yuzpe method (a combined progestin-estrogen pill) must be used due to lack of progesterone only medications (e.g., levonorgestrel),
- the client requests non-hormonal EC [e.g., copper intrauterine device (IUD)]; or if there are known contraindications to hormonal ECs (e.g., obesity) (Interprofessional Advisory Group [IPAG], personal communication, July 19, 2019).

# **Predisposing and Risk Factors**

Predisposing and risk factors for the use of EC include unprotected intercourse in a person of reproductive age, and the timing within the menstrual cycle (e.g., ovulation) when intercourse occurred (Turock, 2019).

# **Health History and Physical Exam**

## **Subjective Findings**

Circumstances should be determined, including the following:

- date and characteristics of last menstrual period;
- time of most recent unprotected or inadequately protected intercourse and whether intercourse was consensual;
- current use of any other contraceptive methods;
- effectiveness of EC, if used in the past;
- potential exposure to sexually transmitted infections (STIs) (Turock, 2019).

The RN(AAP) should also enquire about the following, including a past medical history:

- diabetes, hypertension, migraines, heart disease, thromboembolic disease, a history of cerebrovascular accident, severe cirrhosis or liver tumor, breast cancer;
- current medications; and
- allergies (Raine, 2019; Turock, 2019).

If the client was the victim of assault or abuse, maintain the chain of evidence and refer the client to a physician/NP or Sexual Assault Nurse Examiner (SANE) as per employer policy.

## **Objective Findings**

Typically, there are no findings.

# **Differential Diagnosis**

There are no differential diagnosis.

# **Making the Diagnosis**

The diagnosis is based on history and physical findings, which include client self-report of unprotected or inadequately protected intercourse within the preceding 120 hours/five days. This can include, but is not limited to:

- missing one or more consecutive combined oral contraceptive pills;
- missing one or more progesterone-only pills, or ingestion delayed by more than three hours;
- Depot medroxyPROGESTERone acetate (Depo-Provera) injection that is two or more weeks late;
- transdermal contraceptive patch that is detached for 24 hours or longer during week one or 72 hours or longer during week two or three;
- vaginal contraceptive ring that is expelled or removed for three hours or longer during week one or 72 hours or longer during week two or three;
- vaginal contraceptive ring left in for more than five weeks in a row;

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- delaying the start of a new package of combined hormonal contraception, following menses, by 24 hours or more;
- unprotected sexual intercourse during ovulation period;
- ejaculation onto genitals;
- coitus interruptus;
- condom breakage, leakage or slippage;
- intrauterine contraceptive device expulsion or midcycle removal;
- dislodgement of diaphragm or cervical cap during intercourse;
- spermicide alone at midcycle;
- sexual assault (client not using reliable contraception);
- use of only one method of contraception and (e.g., condom or spermicide) plus recent teratogen exposure [e.g., ISOtretinoin (Accutane)] (Raine, 2019; Turock, 2019).

# **Investigations and Diagnostic Tests**

Diagnosis is usually made by history and clinical assessment. A human chorionic gonadotropin (hCG) urine test is not required before use of EC; however it is usually performed and documented. The client should also be offered testing for STIs (Raine, 2019; Turock, 2019).

# **Management and Interventions**

#### Goals of Treatment

The primary goal of immediate treatment is to prevent pregnancy. It is important to note that hormonal EC methods are not effective for termination of an existing pregnancy (Raine, 2019; Turock, 2019).

## Non-Pharmacological Interventions

The RN(AAP) should recommend, as appropriate, the use of a backup method of contraception until the next menstrual cycle (Raine, 2019; Turock, 2019).

## **Pharmacological Interventions**

The pharmacological interventions recommended for the treatment of hormonal EC are in accordance with *RxFiles Drug Comparison Charts* (RxFiles Academic Detailing Program, 2021), *Lexidrugs: Levonorgestrel* (Lexicomp, 2021), *Emergency Contraception* (Turock, 2019), and *Lexi-drugs Ulipristal* (Lexicomp, 2021).

#### **Hormonal EC**

	Drug	Dose	Route	Frequency	Duration
Pediatric and Adult					
	Levonorgestrel	1.5 mg (1 pill)	p.o.	once	n/a
OR	Ulipristal acetate	30 mg	p.o.	once	n/a

Consider ulipristal acetate as it is more effective when body mass index is greater than 25 kg/m². Hormonal contraception should not be started sooner than five days after taking ulipristal due to the potential to decrease the medications ability to block ovulation.

## Client and Caregiver Education

The RN(AAP) provides client and caregiver education as follows:

- Counsel about the appropriate use of medications (dose, frequency, compliance, etc.) and
  potential side effects (e.g., nausea, vomiting, abdominal pain, fatigue, headache and breast
  tenderness).
- Advise that if vomiting occurs within two hours of taking levonorgestrel or three hours of taking ulipristal hormonal EC, the dose should be repeated.
- Advise that a normal period should start by day 21 of the cycle, after using EC. Clients who begin taking an oral contraceptive after using EC should expect a normal period by day 28 of the cycle.
- Advise that EC will not interrupt a pregnancy that has already implanted in the uterine lining
  and that there are no known teratogenic effects if progestin-only EC is taken during
  pregnancy.
- Advise that Levonorgestrel can be taken if breastfeeding but recommend that breast milk be discarded for 24 hours following ulipristal acetate dose.
- Educate that EC use does not negatively impact future fertility.
- Provide clients of sexual assault, support and information related to assessment and reporting as per employer policy. Refer to a physician/NP for further assessment.
- Discuss and provide materials, as appropriate, concerning safe sex practices, future use of EC, and STI prevention (Raine, 2019; RxFiles Academic Detailing Program, 2021; Turock, 2019).

## Monitoring and Follow-Up

When EC is prescribed, the client should be seen for follow-up:

- to test for pregnancy if she has not had a menstrual period within three weeks, and
- after the next menstrual period to discuss more effective contraception and safe sexual practices (Turock, 2019).

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If the client has diabetes, provide education regarding blood glucose monitoring and request an earlier follow-up because the effect of progestin on blood glucose levels is not known (Raine, 2019; RxFiles Academic Detailing Program, 2021; Turock, 2019).

## **Complications**

Treatment failure is the most significant complication associated with the use of hormonal EC. There does not appear to be any adverse risk with repeated use of progestin-only EC; however, repeated use of EC may warrant further counselling and education on contraceptive choices (Raine, 2019; RxFiles Academic Detailing Program, 2021; Turock, 2019).

#### Referral

Refer to a physician/NP if client presentation is consistent with those identified in the *Immediate Consultation Requirements* section or if the client has a positive pregnancy test at the follow-up appointment (IPAG, personal communication, July 19, 2019).

## References

- Levonorgestrel (Systemic). (2021). In *Lexicomp: Lexi-drugs*. <a href="http://online.lexi.com/lco/action/doc/retrieve/docid/patch-f/5867844?searchUrl=%2Flco%2Faction%2Fsearch%3Ft%3Dname%26g%3DLevonorgestrel%2B%28Systemic%29">http://online.lexi.com/lco/action/doc/retrieve/docid/patch-f/5867844?searchUrl=%2Flco%2Faction%2Fsearch%3Ft%3Dname%26g%3DLevonorgestrel%2B%28Systemic%29</a>
- Raine, S. (2019). Prescribing considerations for emergency contraception. *Journal of Prescribing Practice*, 1(5), 226. doi.org/10.12968/jprp.2019.1.5.226
- RxFiles Academic Detailing Program. (2021). *RxFiles: Drug comparison charts* (13th ed.). Saskatoon, SK: Saskatoon Health Region.
- Turock, D. (2019). *Emergency contraception*. <a href="https://www.uptodate.com/contents/emergency-contraception?source=history">https://www.uptodate.com/contents/emergency-contraception?source=history</a> widget
- Ulipristal. (2021). In *Lexicomp: Lexi-drugs*.

  <a href="http://online.lexi.com/lco/action/doc/retrieve/docid/patch-f/2856384?hl=427390&s">http://online.lexi.com/lco/action/doc/retrieve/docid/patch-f/2856384?hl=427390&s</a>

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