Early Pregnancy Loss (EPL): Emergency Dept. Management

BRIDGE Treatment. Equity. Connection.

This protocol should be used in settings where mifepristone is available. Misoprostol alone is effective in incomplete EPL (active bleeding). (See misoprostol-only protocol). The addition of mifepristone is superior in anembryonic and missed EPL.[1]

April 2025

Early pregnancy loss less than 12 weeks by ultrasound (see page 2 for criteria)

If 12 weeks or greater: Consult GYN

Current heavy bleeding? (2 maxipads/hour or more)

YES → **Emergent GYN consult, place misoprostol 800 mcg (4 tablets) buccally while waiting; consider pain medications**

NO

Shared Decision Making

Expectant Management

Medication Management

Procedural Management

No Intervention

61%[2] effective by 14 days

Pros: Inexpensive, happens outside of the ED.

Cons: Persistent cramping and bleeding for weeks, nearly 1/3 return to ED and need a procedure; resolution can take 8 weeks.

Offer medication for symptoms (ondansetron, ibuprofen)

Standard discharge instructions

Medication Management

(mifepristone with misoprostol)

84-93%[3] effective by 8 days

Pros: Inexpensive, happens outside of the ED, quicker resolution than expectant management, fewer return visits to ED

Cons: Short-lived cramping and bleeding; misoprostol side effects; low failure rate, but some will require follow-up

Offer medication for symptoms (ondansetron, ibuprofen)

Prescribe[4] or give mifepristone: 200 mg tablet by mouth

Gestational weeks as determined by ultrasound

Less than 9 weeks

Discharge Prescriptions

(Dispense from ED if possible)

Prescribe misoprostol 200 mcg tablets, dispense #8

- Place 4 tablets (800 mcg) buccally or vaginally 7–48 hours[5] after taking mifepristone; may use sooner if heavy bleeding
- Use an additional 4 tablets (800 mcg) as needed if no bleeding after 4–24 hours, or if bleeding 2 pads or more an hour for 2 hours (seek medical care if bleeding does not decrease within an hour)

Prescribe ibuprofen 600 mg tablets, dispense #30

- Take 1 tablet by mouth as needed for pain every 6 hours

Prescribe ondansetron 4 mg ODT, dispense #15

- Take 1–2 tablets by mouth as needed for nausea every 8 hours

9 weeks through 11 weeks 6 days

Discharge Prescriptions

(Dispense from ED if possible)

Prescribe misoprostol 200 mcg tablets, dispense #12

- Place 4 tablets (800 mcg) buccally or vaginally 7–48 hours[5] after taking mifepristone; may use sooner if heavy bleeding
- Repeat 4 tablets (800 mcg) in 4 hours regardless of amount of bleeding
- Use additional 4 tablets (800 mcg) if no bleeding after 4–24 more hours, or if bleeding 2 pads or more an hour for 2 hours (seek medical care if bleeding does not decrease within an hour)

Prescribe ibuprofen 600 mg tablets, dispense #30

- Take 1 tablet by mouth as needed for pain every 6 hours

Prescribe ondansetron 4 mg ODT, dispense #15

- Take 1–2 tablets by mouth as needed for nausea every 8 hours

Standard discharge instructions (see page 2 and mifepristone medication guide)

See page 3 for endnotes.

The Reproductive Health Hotline (1 844-REPROHH or 1 844-737-7644)

Free, confidential, nationwide, evidence-based hotline for health care providers. Monday–Friday 6am–5pm PT / 9am–8pm ET.

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EPL criteria: Definitive confirmation of nonviable pregnancy [6]

- **Products of conception in os/vagina or patient reports passage of visible fetus**
- **hCG falls, or rises less than 11% over 48 hours, if initial US showed IUP**
- **By Transvaginal Ultrasound (TVUS):**
  - Crown rump length (CRL) greater or equal to 7mm with no fetal cardiac activity (FCA)
  - Mean sac diameter greater or equal to 25 mm with no embryo
  - Absence of embryo with cardiac activity at least 2 weeks after TVUS with empty gestational sac (GS) or at least 11 days after TVUS showing GS with yolk sac (YS)
  - Prior TVUS demonstrating fetal cardiac activity (FCA) with current TVUS showing no FCA or no embryo

EPL criteria: Probable nonviable pregnancy by TVUS [6]

- CRL less than 7mm with no FCA
- Mean sac diameter 16-24mm with no embryo
- Absence of embryo with FCA 7-13 days after US shows GS
- Absence of embryo with FCA 7-10 days after US shows GS with YS
- Absence of embryo 6 weeks or more after first day of last menstrual period (if patient is sure of date, normal cycles, not on hormonal contraception or breastfeeding)
- Empty sac seen adjacent to yolk sac with no embryo
- Yolk sac greater than 7mm
- Less than 5mm difference between mean sac diameter and CRL

Helpful Counseling

- Buccal misoprostol instructions: Hold between cheek and gums for 30 minutes, then swish with liquid and swallow.
- RhoGAM administration for pregnancies less than 12 weeks in duration is not recommended.[7]
- EPL management does not affect future fertility.
- EPL is not your fault – not caused by stress, activity, sex, drugs, food, or anything else you did or didn't do.

Contraindications to Mifepristone/Misoprostol Protocol

- Allergy to mifepristone or misoprostol
- Porphyria
- Chronic systemic steroids (inhalers/sprays/creams OK)
- Severe symptomatic anemia (hemoglobin not required if asymptomatic)
- Chronic adrenal failure
- Known coagulopathy or current use of anticoagulant therapy (aspirin OK)
- IUD in place (remove prior to treatment)[8]

Post-Treatment

- Routine follow-up US not needed.
- If re-presents to ED and follow-up US done: finding of "uterine debris" is normal – only needs intervention if retained gestational sac/embryo, bleeding more than 2 pads/hour or persistent pain.
- If heavy bleeding or severe pain 24 hours after last misoprostol dose, additional 2-4 misoprostol tablets (400 - 800 mcg) can help the uterus evacuate retained tissue and slow bleeding. If no improvement after 1-2 hours, consult GYN.

Discharge Instructions

- Contraception: Can start anytime: IUD may be placed after confirming no longer pregnant.
- If confirmed IUP, no formal follow up required. Patient must take home pregnancy test to confirm completion of miscarriage (should be negative by 5 weeks).
- If treating EPL that is a PUL (never had ultrasound confirming IUP), follow serial hCGs until negative or refer (shared-decision-making) [9]
- Patient should follow up if pregnancy symptoms persist after a week, the home pregnancy test is still positive in 5 weeks, or if desires earlier confirmation of miscarriage completion.
- Urgent re-evaluation if:
  - One-sided pain (US to rule out ectopic)
  - Severe abdominal pain
  - Soaking 2 or more maxipads an hour for 2 or more hours not improving with misoprosotol
  - Fever over 100.4 F over 24 hours after last misoprostol dose
  - The patient is feeling ill or having any concerning symptoms, such as syncope

Scan for more shared decision making resources

Scan for more patient discharge instructions

See page 3 for endnotes.

ENDNOTES:

1 ACOG and Society of Family Planning recommend use of mifepristone for EPL, if available. The addition of mifepristone to misoprostol increases success rates and decreases time to completion in patients with missed EPL and anembryonic pregnancies. Studies specifically showing the relative benefit of mifepristone/misoprostol vs misoprostol alone for patients with active bleeding were not identified at the time of this publication (April 2025).

2 61% overall (71% for incomplete EPL, 53% for empty sac and 35% for missed EPL). Casikar 2010.

3 See Sonalkar 2020 and Schreiber 2018. Zhang 2005 found a 93% success rate with incomplete EPL using misoprostol-only.

4 Prescribers and pharmacies must be REMS-certified; one prescriber can register for the group. For more information, see REMS 101. Prescribing to an outpatient pharmacy is an option; each prescriber must be registered with that particular pharmacy. To find list of nearby certified pharmacies stocking mifepristone and misoprostol, visit https://www.earlyoptionpill.com/how-do-i-get-mifeprex/find-a-certified-pharmacy/ or review GenBioPro list: https://genbiopro.com/prescribing/.

5 When to take misoprostol should be determined by the patient preference; it has significant side effects (vomiting, diarrhea, bleeding), many patients prefer to take at home, with easy access to a toilet. 2024 SFP EPL guidelines.

6 Criteria based on ACOG guidelines. Note updated criteria allow earlier diagnosis: CRL 5.3mm or more, empty GS of 21 mm, and/or hCG less than 11% over baseline after 48 hours, after an utrasound showing IUP of uncertain viability, are all 100% diagnostic of nonviable pregnancy. 2024 SFP guidelines.

7 Rh testing and RhoGAM administration are not recommended before 12 weeks' gestation for EPL and medical or procedural abortion (ACOG 2024, SFP 2022). No changes have been made to ectopic pregnancy recommendations. Following institutional guidance is recommended.

8 Immediate removal of IUD in pregnancy is standard of care. If the string is visible in the os, IUDs can be removed easily with ring forceps during a speculum exam; see here for 58-second how-to video. For desired pregnancies, immediate IUD removal decreases the chance of miscarriage (ACOG Committee Opinion #672 2016). For EPL management, the IUD must be removed before giving mifepristone and misoprostol. It is best to remove the IUD immediately, but if the patient desires a procedure, the IUD can be removed at the time of the procedure.

9 ACOG recommends following hCGs until negative with PULs. Use shared decision-making with patient weighing relative risks, costs, and availability of follow-up. ACOG Practice Bulletin #193.

REFERENCES:

American College of Obstetricians and Gynecologists' Committee on Practice Bulletins—Gynecology. ACOG Practice Bulletin No. 193: Tubal Ectopic Pregnancy. Obstet Gynecol. 2018 Mar;131(3):e91-e103. doi: 10.1097/AOG.0000000000002560. Erratum in: Obstet Gynecol. 2019 May;133(5):1059. doi: 10.1097/AOG.0000000000003269. PMID: 29470343.

American College of Obstetricians and Gynecologists' Committee on Practice Bulletins—Gynecology. ACOG Practice Bulletin No. 200: Early Pregnancy Loss. Obstet Gynecol. 2018 Nov;132(5):e197-e207. doi: 10.1097/AOG.0000000000002899. PMID: 30157093.

Casikar I, Bignardi T, Riemke J, Alhamdan D, Condous G. Expectant management of spontaneous first-trimester miscarriage: prospective validation of the '2-week rule'. Ultrasound Obstet Gynecol. 2010 Feb;35(2):223.doi:10.1002/uog.7486. PMID:20049981.

Horvath S, Goyal V, Traxler S, Prager S. Society of Family Planning committee consensus on Rh testing in early pregnancy. Contraception. 2022 Oct;114:1-5. doi: 10.1016/j.contraception.2022.07.002. Epub 2022 Jul 21. PMID: 35872236.

Schreiber CA, Creinin MD, Atrio J, Sonalkar S, Ratcliffe SJ, Barnhart KT. Mifepristone Pretreatment for the Medical Management of Early Pregnancy Loss. N Engl J Med. 2018 Jun 7;378(23):2161-2170. doi: 10.1056/NEJMoa1715726. PMID: 29874535; PMCID: PMC6437668.

Sonalkar S, Koelper N, Creinin MD, Atrio JM, Sammel MD, McAllister A, Schreiber CA. Management of early pregnancy loss with mifepristone and misoprostol: clinical predictors of treatment success from a randomized trial. Am J Obstet Gynecol. 2020 Oct;223(4):551.e1-551.e7. doi: 10.1016/j.ajog.2020.04.006. Epub 2020 Apr 17.PMID: 32305259; PMCID:PMC7529708.

Tarleton JL, Benson LS, Moayedi G, Trevino J; with the assistance of Leah Coplon, Anitra Beasley, and Elise Boos on behalf of the Society of Family Planning Clinical Affairs Committee. Society of Family Planning Clinical Recommendation: Medication management for early pregnancy loss. Contraception. 2024 Dec 20:110805. doi: 10.1016/j.contraception.2024.110805. Epub ahead of print. PMID: 3971033.

Zhang J, Gilles JM, Barnhart K, Creinin MD, Westhoff C, Frederick MM; National Institute of Child Health Human Development (NICHD) Management of Early Pregnancy Failure Trial. A comparison of medical management with misoprostol and surgical management for early pregnancy failure. N Engl J Med. 2005 Aug 25;353(8):761-9. doi: 10.1056/NEJMoa044064. PMID: 16120856.