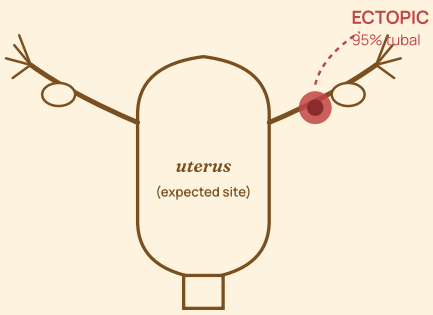
NCLEX 2026 | CLINICAL JUDGMENT | OB EMERGENCY | REPRODUCTIVE / OB

Ectopic Pregnancy.

A life-threatening implantation of a fertilized ovum **outside** the uterine cavity — most often in the fallopian tube. Early recognition prevents rupture, hemorrhage, and maternal death.

01 DEFINITION · OVERVIEW
What It Is & Why It Matters

- **Ectopic = "out of place"** — fertilized egg implants outside the uterine cavity.
- **95% occur in the fallopian tube** (ampulla most common). Other sites: ovary, cervix, abdomen, C-section scar.
- **Pregnancy is NOT viable.** Untreated → tubal rupture → hemorrhagic shock → maternal death. #1 cause of maternal death in the 1st trimester.



NORMAL VS. ECTOPIC IMPLANTATION

PATHOPHYSIOLOGY · SIMPLIFIED

02 How the Damage Happens

1 Fertilization
Sperm meets egg in the fallopian tube — normal start.

→

2 Blocked Transit
Scarred/damaged tube prevents zygote from reaching the uterus.

→

3 Tubal Implantation
Zygote embeds in the tube wall — cannot support pregnancy.

→

4 Tube Stretches
Embryo grows; fallopian tube cannot expand like uterus.

→

5 Rupture
Tube tears → massive **internal hemorrhage** into pelvis.

→

6 Hypovolemic Shock
Blood loss → ↓BP, ↑HR, ↓LOC → maternal death if untreated.

⚠ RISK FACTORS — "ANYTHING THAT DAMAGES THE TUBE"

- Prior ectopic
- PID / STIs (chlamydia, gonorrhea)
- Tubal surgery / ligation
- IUD in place
- Endometriosis
- Smoking
- Assisted reproduction (IVF)
- Maternal age > 35

CLINICAL FINDINGS

03 Signs & Symptoms

EARLY · UNRUPTURED

- **Missed period** (amenorrhea) + positive pregnancy test
- **Low or slow-rising β-hCG** (fails to double q48h)
- **Unilateral** dull lower abdominal/pelvic pain
- Light vaginal **spotting** — dark red / brown
- Nausea, breast tenderness (normal early pregnancy signs)
- Tender adnexal mass on pelvic exam

LATE · RUPTURED

- **SUDDEN, SHARP, SEVERE** unilateral abdominal pain
- **Referred shoulder pain (Kehr's sign)** — from diaphragmatic irritation by blood
- **Cullen's sign** — bluish discoloration around umbilicus
- Rigid, board-like abdomen
- **↓BP, ↑HR**, cool clammy skin, pallor
- Dizziness, syncope, ↓LOC — **hypovolemic shock**

⚡ **The Classic Triad (AAA):** Amenorrhea + Abdominal pain + Abnormal vaginal bleeding → suspect ectopic until proven otherwise.

PRIORITY NURSING ACTIONS

04 What the Nurse Does First

ABC Airway · Breathing · Circulation always come first. If rupture is suspected → treat as a **hemorrhagic emergency**. Maslow & ABCs outrank emotional support in the acute phase.

01 **Assess** ABCs, LOC, and complete vital signs q5–15 min PRIORITY

02 **Establish** 2 large-bore IV lines (16–18 g) for fluid resuscitation

03 **Monitor** for hemorrhage — H&H, abdominal girth, pad count

04 **Type & crossmatch** blood; prepare for transfusion

05 **Administer** IV fluids (LR, NS) and oxygen as ordered

06 **Obtain** serial quantitative β-hCG, CBC, and prepare for transvaginal US

07 **Prepare** the patient for surgery — *salpingostomy* or *salpingectomy*

08 **Administer** Rh(D) immune globulin (RhoGAM) if mother is Rh-negative

09 **Control** pain with ordered analgesics; position for comfort

10 **Strict I&O** — urine output < 30 mL/hr = poor perfusion ⚠

11 **Provide** emotional/grief support; offer chaplain or counseling

12 **Educate** on follow-up β-hCG trending *down* to zero

05 PHARMACOLOGY · HIGH YIELD

Key Medications

Methotrexate (MTX)

FOLIC ACID ANTAGONIST · ANTINEOPLASTIC

MECHANISM & INDICATION

- Inhibits DNA synthesis → dissolves rapidly dividing trophoblast tissue
- ONLY for **early, unruptured, hemodynamically stable** ectopic (β-hCG < 5,000, mass < 3.5 cm, no fetal heartbeat)
- Given IM; avoids surgery & preserves tube

SIDE EFFECTS

- N/V, stomatitis, diarrhea
- Photosensitivity
- Hepatotoxicity · ↑ LFTs
- Bone marrow suppression (↓WBC, ↓Plt)
- Alopecia

NURSING CONSIDERATIONS & TEACHING

- **NO** folic acid or prenatal vitamins (reverses the drug)
- **NO** NSAIDs (↑ toxicity)
- **NO** alcohol (hepatotoxicity)
- **NO** sun exposure — use sunscreen
- **NO** pregnancy for ≥ 3 months after
- Monitor β-hCG weekly until zero
- Monitor CBC, LFTs, BUN/Cr
- Avoid intercourse until cleared

Rh(D) Immune Globulin (RhoGAM)

Given to Rh-negative patients within 72 h to prevent maternal Rh sensitization & protect future pregnancies.

IV Fluids / Blood Products

LR or NS for volume; PRBCs/FFP for hemorrhage. Treat shock → maintain MAP ≥ 65 and UO ≥ 30 mL/hr.

NCLEX TEST TRAPS

06 What Students Get Wrong

Trap 1 · The "Gas Pain"

Shoulder pain in a pregnant patient is *NOT* muscle strain or gas — it's **Kehr's sign = ruptured ectopic**.

Trap 2 · Bleeding Confusion

Ectopic bleeding is often *light* externally but massive *internally*. Don't use pad count alone to judge severity.

Trap 3 · The hCG Illusion

Low or slow-rising β-hCG (doesn't double q48h) is NOT a normal pregnancy — suspect ectopic.

Trap 4 · Methotrexate Misuse

MTX is *contraindicated* if ruptured, unstable, fetal heart tones, or β-hCG > 5,000. Surgery is the answer.

Trap 5 · The Folic Acid Mistake

NEVER give folic acid or prenatal vitamins with MTX — it reverses the drug's action.

Trap 6 · Priority Misjudgment

On NCLEX,
ABCs always outrank emotional support
. Stabilize vitals FIRST; grief counseling comes after the patient is safe.

Trap 7 · Miscarriage Mix-up

Miscarriage = uterine cramping + heavy vaginal bleeding. Ectopic = *unilateral* pain ± hidden internal bleed.

Trap 8 · The Delay Trap

In a hypotensive pregnant patient with abdominal pain, don't wait for "more data" —
notify the provider STAT
and prepare for emergency intervention.

PATIENT EDUCATION

07 What to Teach Before Discharge

- **Report immediately:** severe one-sided abdominal pain, shoulder pain, dizziness, or heavy bleeding.
- **Keep all follow-ups** for weekly β-hCG draws until the level reaches zero.
- **On MTX:** avoid folic acid, prenatal vitamins, NSAIDs, alcohol, and sun exposure.
- **No pregnancy** for at least 3 months after methotrexate; use reliable contraception.
- **Future pregnancy:** get an *early* ultrasound to confirm intrauterine implantation.
- **Grief is valid.** Seek counseling or support groups; pregnancy loss deserves bereavement care.
- **Higher risk** of another ectopic exists — prompt prenatal care is essential.
- **Prevent PID/STIs:** practice safe sex; early treatment of infections protects fertility.

MEMORY BOOSTERS

08 Mnemonics & Pattern Recognition

A.A.A. *triad*

Amenorrhea + **A**bdominal pain + **A**bnormal bleeding → think *ectopic*.

TUBAL *Trouble*

95% of ectopics land in the *T*ubes. "If the Tube's in Trouble — think Tubal pregnancy."

Kehr's *Key*

Shoulder pain in a woman of childbearing age = **ruptured ectopic** until proven otherwise.

Slow-Grow *hCG*

Normal pregnancy: hCG **doubles q48h**. Ectopic: slow, plateaued, or falling hCG.

MTX = "No, No, No, No"

No folic acid · **No** NSAIDs · **No** alcohol · **No** sun · **No** pregnancy × 3 months.

Cullen's *Blue Belly*

Bluish periumbilical bruising = **intra-abdominal bleeding** — a rupture red flag.