OBSTETRIC EMERGENCIES · CLINICAL COMPARISON

Abruptio Placentae vs Placenta Previa

A side-by-side guide to recognizing, prioritizing, and managing third-trimester bleeding

MATERNAL-NEWBORN | NGN CLINICAL JUDGMENT | HIGH-YIELD

01 Definition & Overview

WHAT IT IS · WHY IT MATTERS

CONDITION A

Abruptio Placentae

Premature placental separation · after 20 wks gestation

- **Premature separation** of a *normally implanted* placenta from the uterine wall.
- Separation may be **partial or complete**; bleeding can be **revealed** (visible) or **concealed** (trapped behind placenta).
- **EMERGENCY** Leading cause of **maternal & fetal death** in the third trimester.

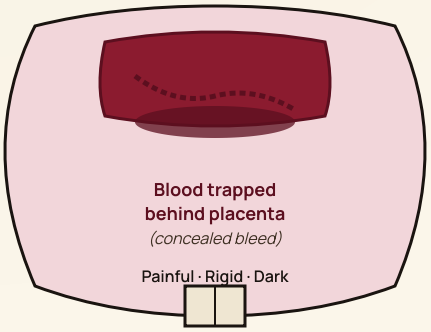
CONDITION B

Placenta Previa

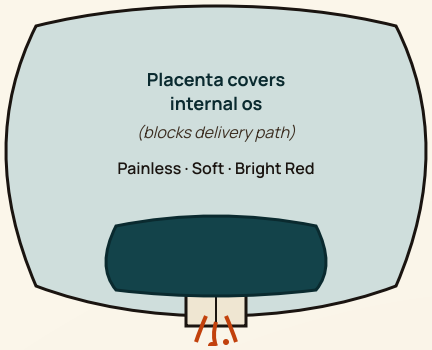
Low implantation covering the cervical os

- Placenta implants in the **lower uterine segment**, partially or completely covering the *internal cervical os*.
- Types: **Complete** (covers os fully) · **Partial** · **Marginal** · **Low-lying**.
- **BLEEDING RISK** Occurs as the lower segment thins & cervix begins to efface late in pregnancy.

ABRUPTION — SEPARATION FROM WALL



PREVIA — IMPLANTED OVER OS



02 Pathophysiology

STEP BY STEP · THE MECHANISM

ABRUPTION PATHWAY

1. Maternal vessels in the **decidua basalis** rupture
2. Blood collects *between placenta & uterine wall*
3. Placenta separates → **gas exchange fails**
4. Thromboplastin released → **DIC risk**
5. Blood may infiltrate myometrium → *Couvelaire uterus* (purple/blue)

PREVIA PATHWAY

1. Embryo implants in **lower uterine segment**
2. Placenta grows *over or near the internal os*
3. 3rd trimester: cervix begins to **efface & dilate**
4. Placental villi **tear from wall** → bleeding
5. Lower segment has few pain fibers → *painless bleed*

ABRUPTION · REMEMBER

Tearing AWAY → Pain & Rigidity

PREVIA · REMEMBER

Placed OVER os → Painless Bleed

03 Signs & Symptoms

RECOGNITION · RED FLAGS

FEATURE	ABRUPTIO PLACENTAE	PLACENTA PREVIA
Bleeding color	**Dark red** · or *NO visible blood* if concealed	**Bright red** · always visible
Pain	**SEVERE** sudden abdominal / back pain · constant	**PAINLESS** bleeding · classic finding
Uterine tone	**Board-like, rigid** · tender · hypertonic	**Soft** · non-tender · normal tone
Contractions	Hyperactive · little/no relaxation between	Usually absent · uterus relaxed
Fetal heart rate	**Late decels, bradycardia, ↓ variability**	Usually reassuring unless major hemorrhage
Maternal shock	**Disproportionate** to visible loss (concealed bleed)	Proportional to visible loss
Onset	Sudden · often linked to trauma, HTN, cocaine use	Recurrent painless episodes · usually after 20 wks
Fetal position	Usually normal cephalic	**Malpresentation common** · breech / transverse

RED FLAG FINDINGS — Recognize Immediately

- **Abruption:** rigid board-like uterus + dark bleeding
- **Abruption:** shock signs *without* heavy visible bleeding
- **Abruption:** bleeding from IV sites, gums, hematuria → **DIC**
- **Abruption:** sudden loss of fetal heart tones
- **Abruption:** Couvelaire uterus — purple / blue uterus
- **Previa:** bright red painless bleeding in 3rd trimester
- **Previa:** sudden gush after intercourse or exam
- **Previa:** fetus in breech or transverse lie
- **Previa:** hypotension / tachycardia from large bleed
- **BOTH:** ↓ fetal movement reported by mother

036 Risk Factors

WHO IS MOST AT RISK

ABRUPTION · RISK PROFILE

- **Maternal HTN** (chronic, gestational, preeclampsia) — #1 risk
- **Cocaine / methamphetamine** use (vasoconstriction)
- **Cigarette smoking**
- **Abdominal trauma** — MVA, domestic violence, falls
- **Previous abruption** (recurrence ~10×)
- **PROM** & multiparity
- Advanced maternal age, short umbilical cord
- Polyhydramnios with sudden decompression

PREVIA · RISK PROFILE

- **Previous C-section** (uterine scarring) — #1 risk
- **Previous placenta previa**
- **Prior uterine surgery** · D&C · myomectomy
- **Multiparity** & advanced maternal age (>35)
- **Multiple gestation** (larger placenta)
- **Cigarette smoking** & cocaine use
- Assisted reproduction (IVF)
- Short interpregnancy interval

Diagnostics — Confirm Before Acting

- **Abruption:** Largely *clinical diagnosis*. Ultrasound can *miss* early abruption — do NOT rule out based on negative US.
- **Previa:** *Transabdominal or transvaginal ultrasound* is the gold standard. **NEVER** perform digital vaginal exam until previa is ruled out.
- **Both:** CBC, type & crossmatch, coags (PT/PTT/INR), fibrinogen, Kleihauer-Betke (assess fetomaternal hemorrhage if Rh-negative)

04 Priority Nursing Interventions

ABCS · SAFETY · NCLEX PRIORITIZATION

A	B	C	D
AIRWAY · O_2 8–10 L MASK	BREATHING · PULSE OX	CIRCULATION · 2 LARGE-BORE IVS	DELIVERY · PREP C-SECTION

✓ *FIRST FOR BOTH — Apply These Interventions Immediately*

- **Assess** ABCs, vital signs *q5–15 min*, level of consciousness, skin color
- **Position** patient in **LEFT lateral** tilt (relieves vena cava compression, ↑ uteroplacental perfusion)
- **Establish** *2 large-bore IVs* (16–18 g); infuse warmed LR or NS
- **Apply** continuous *external* fetal monitor & tocodynamometer — **NEVER INTERNAL**
- **Administer** O_2 8–10 L/min via non-rebreather mask
- **Draw** CBC, type & crossmatch (2–4 units PRBCs), coag panel, fibrinogen, Rh status
- **Insert** Foley catheter — strict I&O, target urine output ≥ 30 mL/hr
- **Maintain** NPO status — prepare for possible emergent operative delivery
- **Estimate** blood loss by weighing pads (1 g = 1 mL)
- **Notify** provider, anesthesia, NICU, blood bank · provide emotional support

ABRUPTION-SPECIFIC ACTIONS

- **Prepare for emergent C-section** — typically the definitive intervention
- **Monitor for DIC**: petechiae, bleeding from IV sites, ↑PT/PTT, ↓ fibrinogen, ↓ platelets
- Administer **blood products** as ordered: PRBCs, FFP, platelets, cryoprecipitate
- Assess for *Couvelaire uterus* — be prepared for possible hysterectomy
- If preeclampsia coexists: monitor BP, DTRs, magnesium levels
- Document fundal height — *rising fundus* = ongoing concealed bleeding
- **DO NOT** give tocolytics — abruption requires delivery

PREVIA-SPECIFIC ACTIONS

- ⛔ **NO** vaginal exams · NO rectal exams · NO enemas · NO intercourse
- **Strict bed rest**; bathroom privileges only if stable and ordered
- If *preterm & stable*: **betamethasone** 12 mg IM × 2 (24h apart) for fetal lung maturity
- If < 34 wks & contracting: **magnesium sulfate** for tocolysis & fetal neuroprotection
- **Plan scheduled C-section** at ~36–37 weeks if stable
- Monitor for **placenta accreta spectrum** (especially with prior C-section)
- Provide *Trendelenburg only if shock develops* — left lateral is first-line

⚡ *At-the-Bedside Priority Recall*

Prepare for emergent C-section	TOP PRIORITY	Strict bed & pelvic rest
Watch for DIC labs	MONITOR	Watch for sudden bleed
Yes — deliver baby now	TOCOLYTICS?	Yes (if preterm + stable)
Permitted if needed for assessment	VAG EXAM?	⛔ NEVER until previa ruled out

05 Pharmacology

KEY DRUGS · INDICATIONS · CAUTIONS

Betamethasone

CORTICOSTEROID · FETAL LUNG MATURITY

USE Accelerate fetal surfactant production (24–34 wks)
DOSE 12 mg IM × 2 doses, **24 hours apart**
SE Maternal hyperglycemia · pulmonary edema
NSG Monitor blood glucose (esp. in diabetic mothers)

Magnesium Sulfate

TOCOLYTIC · NEUROPROTECTANT

USE Tocolysis (previa, preterm labor) · neuroprotection < 32 wks
SE Toxicity → loss of DTRs · resp depression · ↓ urine output
ANTIDOTE **Calcium gluconate** at bedside
NSG Monitor DTRs, RR >12, urine ≥30 mL/hr, Mg levels (4–7 mEq/L)

Rh_0(D) Immune Globulin (RhoGAM)

RH ISOIMMUNIZATION PROPHYLAXIS

USE Rh-negative mother with bleeding event
DOSE 300 mcg IM within 72 hrs of bleeding
SE Local soreness · low fever
NSG Confirm Rh status; obtain Kleihauer-Betke

Oxytocin (Pitocin)

UTEROTONIC · PPH PREVENTION

USE **POSTPARTUM** — prevent/treat uterine atony & PPH
SE Water intoxication · uterine hyperstimulation
NSG **NOT GIVEN** during active abruption — after delivery only

IV Fluids · Blood Products

VOLUME RESUSCITATION

USE LR or NS — maintain perfusion; PRBCs for ongoing loss
DIC FFP · platelets · cryoprecipitate (low fibrinogen)
NSG 2 large-bore IVs; warm fluids; type-specific blood

Antihypertensives

LABETALOL · HYDRALAZINE · NIFEDIPINE

USE Severe HTN (often coexists with abruption)
GOAL BP < 160/110 to prevent stroke
NSG Monitor BP q15min · avoid methylergonovine (worsens HTN)

⚠ *Pharmacology Pitfalls*

- **Methylergonovine (Methergine):** NEVER give to patients with HTN — common in abruption with preeclampsia
- **Tocolytics:** avoid in active abruption (delivery is the priority) — may be used cautiously in stable previa
- **Misoprostol (Cytotec):** not for active third-trimester bleeding — used postpartum if needed for atony

06 NCLEX Test Traps

COMMON MISTAKES · CLINICAL REASONING

1. **"Painful + dark bleeding" = abruption**; **"painless + bright red" = previa**. The single highest-yield distinguishing feature.
2. **NEVER perform a digital vaginal or cervical exam if previa is suspected** — can trigger massive hemorrhage. Confirm placental location by ultrasound first.
3. **Concealed abruption is more dangerous than revealed.** Patient may show signs of shock (tachycardia, hypotension, pallor) with little or no visible vaginal bleeding.
4. **Board-like rigid uterus = abruption.** Soft, non-tender uterus = previa. Palpation is a key assessment finding.
5. **Left-lateral position** is the *first* position change — not Trendelenburg. Trendelenburg only if shock develops.
6. **Internal fetal scalp electrode is contraindicated** — always external monitoring with placental bleeding.
7. **Cocaine use → think abruption** (vasoconstriction). **Prior C-section → think previa** (scarring promotes low implantation).
8. **Don't confuse with uterine rupture:** sudden tearing pain + *cessation* of contractions + presenting part recedes + previous uterine scar history.
9. **Don't massage the uterus during active abruption** — fundal massage is for postpartum atony, not antepartum bleeding.
10. **Rising fundal height** in suspected abruption = ongoing concealed hemorrhage. Mark fundal level and reassess frequently.

07 Patient Education

SELF-CARE · SAFETY · WHEN TO CALL

If You Are at Risk for Abruption

- ✓ **Manage blood pressure** — keep all prenatal appointments, take BP meds as prescribed
- ✓ **Stop smoking, cocaine, alcohol** entirely
- ✓ **Wear seatbelts** properly — lap belt LOW under belly, shoulder strap between breasts
- ✓ **Report immediately:** any vaginal bleeding, severe abdominal/back pain, ↓ fetal movement, contractions
- ✓ **Avoid trauma** — driving safety, prevent falls, recognize signs of domestic violence and seek help
- ✗ No vigorous activity without provider clearance
- ✓ **Postpartum:** watch mood — emergency delivery ↑ risk for PPD & PTSD

If You Have Placenta Previa

- ✓ **Strict pelvic rest:** no intercourse, no douching, no tampons
- ✗ No vaginal exams from anyone, ever, until cleared
- ✓ **Avoid** heavy lifting (>10 lb), strenuous exercise, long travel
- ✓ **Follow bed rest** orders precisely — modified vs strict per provider
- ✓ **Keep hospital bag packed** by 28 weeks; know route to hospital
- ✓ **Report immediately:** any bleeding (even small), contractions, ↓ fetal movement, ROM
- ✓ **Plan for scheduled C-section** around 36–37 wks; vaginal birth is not safe

08 Memory Boosters

MNEMONICS · PATTERN RECOGNITION

A·B·R·U·P·T

A	**Abdominal pain** — sudden, severe, constant
B	**Board-like, rigid** uterus
R	**Red-dark** bleeding (or concealed)
U	**Uteroplacental insufficiency** → fetal distress
P	**Preeclampsia/HTN** · top risk factor
T	**Trauma · Tobacco · Toot** (cocaine)

P·R·E·V·I·A

P	**Painless** bleeding
R	**Red-bright** bleeding
E	**Episodes recurring** in 3rd trimester
V	**Vaginal exam VERBOTEN** ⛔
I	**Implantation low** — covers the os
A	**Avoid intercourse** & anything per vagina

🎯 *Pattern Recognition — Rapid Decision Cues*

- **"Dark blood + pain + rigid"** → ABRUPTION · prepare for emergent C-section · monitor for DIC
- **"Bright blood + painless + soft"** → PREVIA · NO vag exam · scheduled C-section plan
- **"Shock without much blood seen"** → CONCEALED ABRUPTION · trust the vitals, not the pad count
- **"Sudden tearing pain + contractions stop + scar history"** → think UTERINE RUPTURE, not abruption
- **"After 20 wks · painless bleeding"** → previa until proven otherwise · ultrasound first
- **Risk factor shortcut:** Cocaine/HTN/Trauma → Abruption · Prior C-section/Scarring → Previa