

# **PLACENTAL ABRUPTION**



Complete sepa-

ration of placenta

from uterine wall

Detached placenta

External bleeding

Placental abruption (abruptio placentae) is a premature separation of the placenta from the uterine wall before completion of second-stage labor. This obstetric emergency compromises fetal oxygen supply, prompting fetal distress and possible death. Bleeding from the placental site can lead to shock, disseminated intravascular coagulation (DIC) and possible death for the client without prompt intervention.

## Management

Placental separation may be marginal, partial, or complete. Bleeding may be concealed or visible externally.



Placenta Marginal separation at placental edge External bleeding

Marginal separation



Concealed bleeding

Partial separation

of placenta from

uterine wall

Partial separation

# Pathophysiology and associated risk factors

Placental abruption occurs due to compromise to the vascular structures that support the placenta and connect it to the uterine lining. This vascular compromise may occur due to:

#### Increased pressure:

- Hypertension
- Preeclampsia

#### Abnormal vasoconstriction:

- Smoking
- Cocaine use

#### Over-stretching of the uterus:

- Polyhydramnios
- Multiple gestation

#### Shearing force:

• Trauma (fall, car wreck, physical abuse)

#### Other risk factors include:

- Client age > 35
- History of placental abruption in prior pregnancy

## **Clinical presentation**

Symptoms may range from mild to severe based on extent of abruption.

#### Pregnant client:

- Sudden uterine pain
- Sustained uterine contraction; rigid abdomen
- Bleeding present or absent
- Vital sign alterations, if bleeding severe
- Clotting profile alterations, if bleeding severe
  - Hypofibrinogenemia
  - Coagulopathy

#### Fetus:

- Decreased fetal movement
- Decreased FHR variability
- Late decelerations
- Sustained bradycardia

### Management

• Initiate client vital sign monitoring.

**Complete abruption** 

- Initiate continuous fetal monitoring.
- Insert 2 large bore intravenous lines.
- Apply supplemental oxygen, as needed.
- Draw lab work.
- Prepare to assist vaginal birth, if imminent (may occur quickly at term due to uterine hyperstimulation)
- Prepare for cesarean birth, if indicated due to client or fetal compromise.
- Be aware of risk of DIC; proactively prepare for postpartum hemorrhage.

## **Evaluation**

**Ultrasound:** Identify placental location, rule out previa. However: US has low sensitivity for identifying acute abruption.

**Labs:** CBC, clotting studies (fibrinogen and PT/a-PTT), type/screen, Kleihauer–Betke

**Biophysical profile:** Assess fetal well-being. Score of 6 or below indicates fetal compromise.

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