

PLACENTAL ABRUPTION

General Consideration:

- Definition: Premature separation of the placenta from its site of implantation from 24 weeks of gestation until delivery of baby.
- Incidence;
 - 0.4-2%

GRADING:

- Grade 0: Separation not apparent until placenta examined > delivery.
- Grade 1: minimal - causes vaginal bleeding & alterations in maternal VS.
- Grade 2: moderate - + signs of fetal distress. Uterus tense & painful when palpated.
- Grade 3: extreme (total) separation. Maternal shock/fetal death if immediate intervention not done.

Etiology:

- Uncertain (primary cause).
- Risk factors:
 1. Increased age and parity.
 2. Vascular diseases: preeclampsia, chronic hypertension, renal disease.
 3. Mechanical factors: trauma, intercourse, polyhydramnios.
 4. Supine hypotensive syndrome.
 5. Smoking, cocaine use, uterine myoma

Pathology:

- Main change: hemorrhage into the decidua basalis → decidua splits → decidural hematoma → separation, compression, destruction of the placenta adjacent to it.
- Types: revealed abruption, concealed abruption, mixed type

Manifestation:

- Vaginal bleeding accompanied with abdominal pain.
 - Mild type: abruption $\leq 1/3$, apparent vaginal bleeding.
 - Severe type: abruption $> 1/3$, large retroplacental hematoma, vaginal bleeding accompanied by persistent abdominal pain, tenderness on the uterus, change of fetal heart rate. shock and renal failure.

Examination:

Abdominal examination:

- Tender tense uterus (woody hard).
- The fetus is difficult to palpate.
- Fetus may be dead, in distress or unaffected (size-location of abruption)

Diagnosis:

- Sign and Symptom:
 - Vaginal bleeding.
 - Uterine tenderness or back pain.
 - Fetal distress.
 - High frequency contractions.
 - Idiopathic preterm labor.
 - Dead fetus.
- Ultrasonography:
 - Position of placenta, severity of abruption, survival of fetus.
 - Signs: retro placental hematoma.
 - Negative findings do not exclude placental abruption

Complications:

- DIC.
- Hypovolemic shock.
- Amnionic fluid embolism.
- Acute renal failure.
- Fetomaternal haemorrhage.
- Perinatal mortality.
- Fetal growth restriction.

Treatment:

- Treatment will vary depending upon gestational age and the status of mother and fetus.
- Treatment of hypovolemic shock: intensive transfusion with blood.
- Assessment of fetus.
- Termination of pregnancy: CS or Vaginal delivery.