Antepartum haemorrhage APH

- Vaginal bleeding after age of viability
- Blood loss is a major cause of maternal death
- Incidence 4%

Causes

- Placenta previa 20-30%
- Abruptio placentae 15-20%
- Unclassified 50%
  - Marginal seperation 60%
  - Show 20%
  - Local causes 6%
  - Vasa previa 0.05%
  - Unknown cause

Placenta previa

- Incidence 1/250 deliveries
  20-30% of APH
- Majority present as painless vaginal bleeding by 30 weeks of gestation
- 20% bleeding and abdominal pain
- Incidental discovery

Predisposing factors

- Multiparity
- Increased maternal age
- Previous placenta previa, recurrence rate 4-8%
- Multiple gestation
- Previous cesarean section
- Uterine anomalies

Classification,Grade (Relation to internal os)

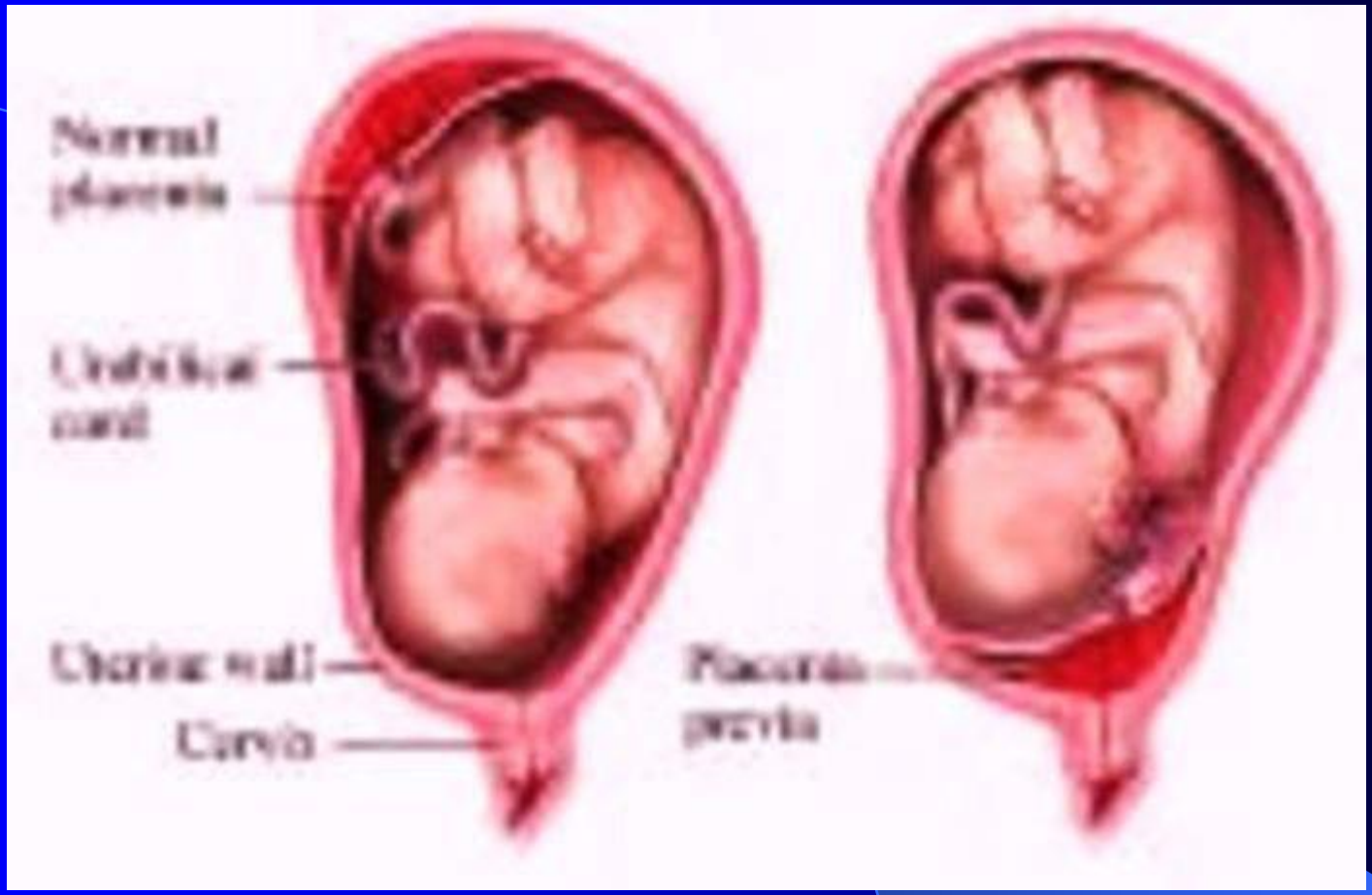
- Minor

  Grade I, Low lying placenta

  Grade II anterior, marginal
- Major
- Grade II posterior
- Grade III, partial
- Grade IV, central, complete.

Presentation

- Painless vaginal bleeding, more sever with major degrees
- Recurrent bouts of bleeding may be from early pregnancy
- Malpresentation and high presenting part
- Uterus is soft and not tender
- Fetus is usually alive and well
- More serious for mother than fetus


Normal
placenta
Umbilical
cord
Cervix
placenta
previa

Maternal risks

- Maternal mortality 0.1% maily from hemorrhage
- PPH
- Anesthesia
- Sepsis
- Air embolism ??
- DIC, late occurring, late

Fetal risks

- High perinatal mortality *** prematurity***
- IUGR in 15-20%
- Congenital malformations doubled
- Umblical cord complication
- Malpresentation

Diagnosis

- Ultrasonography

  *Abdominal 95% accurete

  *Vaginal usually for post placenta difficult to define by abdominal ultrasound (done in hospital)

  * Double set up examination rarely needed in patients not actively bleeding

Management

- Proper assessment of maternal condition and resuscitation
- In sever bleeding, emergency cesarean delivery irrespective of gestational age
- If bleeding after 36-37 weeks deliver.
- If bleeding not sever and early pregnancy, expectant management, attempting to reach fetal maturity (36-38 weeks) without risking maternal health

Expectant management

- Keep in hospital especially in major degree
- Steroids
- Correct anemia ? Blood transfusion
- Cross-matched blood should be available all the time
- Assess fetal well-being

Delivery

- Delivery is by cesarean section
- ?? Anterior marginal placenta with lower margin >2cm from the internal os (by USS) may be delivered vaginally
- Observe for PPH
- Prophylaxis for Rh isoimmunization

Placental abruption

- Premature separation of the placenta
  (before delivery of the fetus)
- Incidence
  0.5-1.5%

Predisposing factors

- Hypertension, mostly PET, in pregnancy
- Previous placental abruption, recurrence rate after one episode 8-17%, after two episodes 25%
- Trauma
- Polyhydramneous
- Premature rupture of memb.
- Short cord
- Smoking
- High parity and low social class
- Idiopathic

Clinical presentation

Concealed	25-30%
Revealed	65-80%
Other:	
Mild	
Moderate	
Sever abruption	

Classification

- Grade 0. Asymptomatic, small retroplacental clot after delivery
- Grade 1. *External vaginal bleeding
  *Uterine tetany and tenderness may be present
  *No signs of maternal shock
  *No evidence of fetal distress

- Grade 2. *External vaginal bleeding may or may not be present.
  Uterine tender and tentany .
  No signs of maternal shock.
  Signs of fetal distress present.
- Rade 3. External bleeding may or may not be present.
  Marked uterine tetany.
  Persistent abdominal pain.
  Maternal shock.
  Fetal death or distress.

Classification

- Grade 2. *External vaginal bleeding may or may not be present
  *Uterine tender and tentany .
  *No signs of maternal shock
  *Signs of fetal distress present
- Rade 3. *External bleeding may or may not be present
  *Marked uterine tetany
  *Maternal shock
  *Fetal death or distress
  *Coagulopathy in 30% of the cases

Differential Diagnosis

- Revealed: may present like placenta previa or local causes
- Concealed:

  *Intraperitonial haemorrhage

  *Ruptured uterus

  Abdominal pregnancy

  *Acute polyhydramnious

  *degenerated fibroid or complicated ovarian cyst

  *Volvolus & Peritonitis

Clinical presentation

- Vaginal bleeding, variable amount, no bleeding in concealed
- Abdominal pain, discomfort and backache in 65% of cases
- Uterine tetany and tenderness over placental site, more in concealed
- Normal lie and presentation
- High incidence of fetal distress and fetal death. Fetus is dead in 25-35% of cases at admission (perinatal mortality 4.4-67%)

Clinical presentation

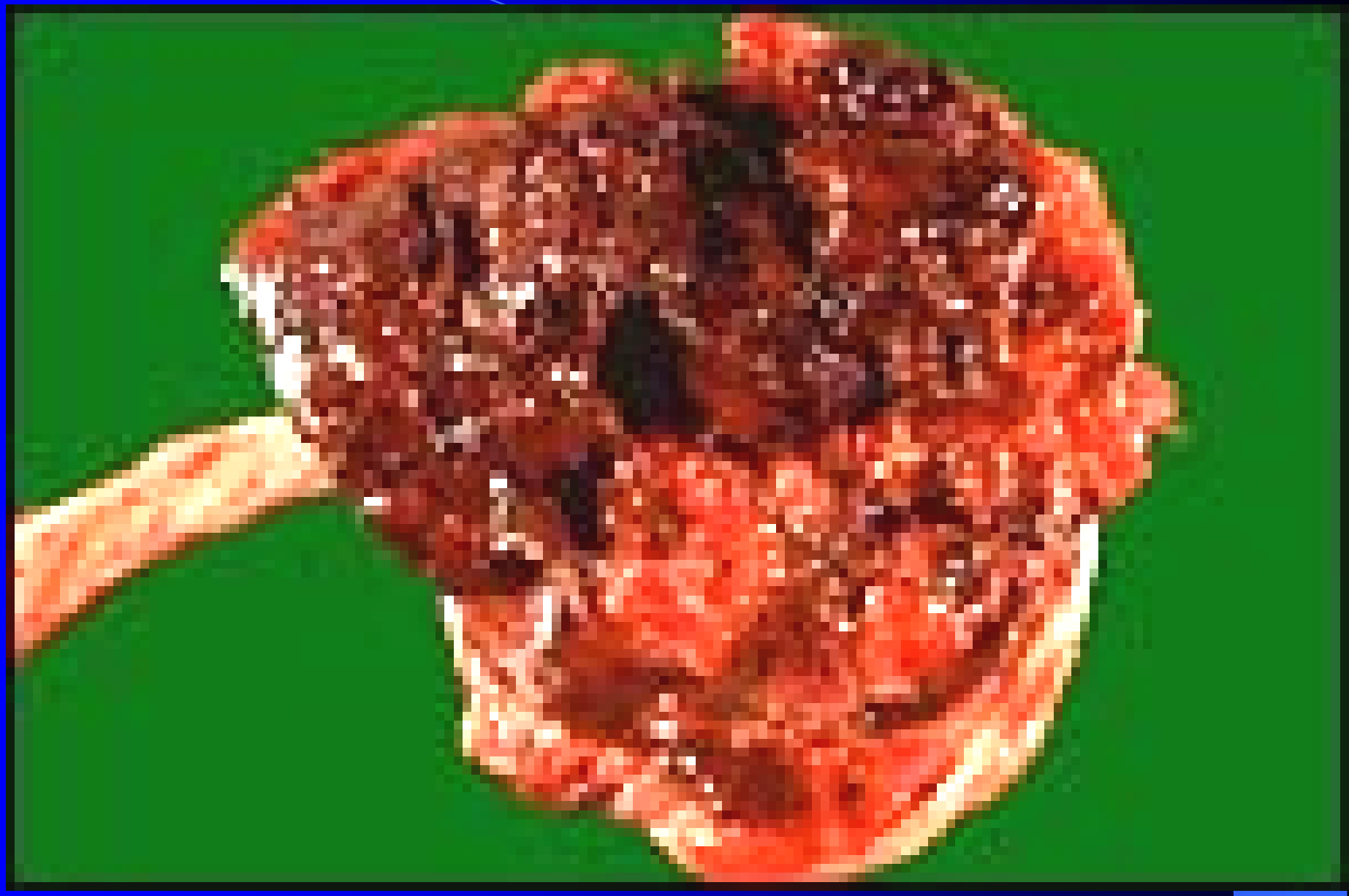
- Blood pressure may be normal or elevated, protein urea (IUGR present in 80% of cases delivered after 36 weeks of gestation)
- Over distended uterus, rigid, difficult to feel fetal parts in concealed hemorrhage
- Evidence of skin ecchymosis in 13% of cases usually those admitted with fetal death

Management

- Ressuscitation,IV canula,IV crystalloid
- Cross match blood and FFP
- Assessment of mother, put fixed catheter, CBC,KFT,Urine for protein, and coagulation profile
- Assessment of fetal wellbeing, CTG
- Definitive treatment by delivery, assess fo labour, do ARM and syntocinon infusion. Any fetal distress or deterioration of maternal condition deliver by C/S

Management

- DIC, packed RBC and FFP
- Observe for PPH
- Observe urine output, risk of renal tubular or cortical necrosis



VASA previa

- Fetal bleeding presented as acute fetal distress after membranes ruptured