السلام عليكم ورامية الله وبركاته
Obstetric Haemorrhage

Obstetric Emergencies
Al-Batool Teaching hospital
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6th Grade
Ante partum Haemorrhage

*Bleeding from the genital tract in pregnancy at 28 week’s of gestation and till the delivery.

* It affects 4% of all pregnancies.

*It is associated with increased risks of fetal and maternal morbidity and mortality.
Antepartum Haemorrhage

Causes of AntePartum haemorrhage

- Placenta previa 20-30%
- Abruptio placentae 15-20%
- Unclassified 50%
  - Marginal separation 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
PLACENTA PRAEVIA

Predisposing factors

• Previous Caesarean Section

• Most have no known cause – presumed late implantation
Predisposing factors

- Multiparity
- Increased maternal age
- Previous placenta previa, recurrence rate (4-8%)
- Twin pregnancy
- Uterine anomalies
Classification, Grades (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.
Types of placenta previa prior to onset of labor (above) or after onset of labor (below).
A. Complete, or total. B. Incomplete, or partial. C. Marginal, or low-lying.
Presentation

- Painless vaginal bleeding
- Recurrent bleeding
- Malpresentation
- Uterus is soft and not tender
- Fetus is usually alive and well
Placenta previa is caused when the placenta forms low on the uterine wall and covers the cervix. With the birth canal blocked, a Caesarean delivery is required.

A routine ultrasound will usually detect placenta previa. If not, the mother will be alerted to her condition by painless vaginal bleeding in the latter half of pregnancy.

If severe bleeding occurs, the mother is restricted to bed rest or kept in the hospital. As soon as it is safe for the baby to be delivered, a Caesarean section is performed.
Placenta Praevia

- Diagnose by Ultrasound

*Abdominal 95% accurate
Management

- Proper assessment and resuscitation
- In severe bleeding, emergency cesarean delivery irrespective of gestational age (preterm give steroid)
- If bleeding after 36-37 weeks deliver.
Placental abruption

- Premature separation of the placenta (before delivery of the fetus)
- Incidence (0.5-1.5%)
- About (15-20)% of APH
ABRUPTIO PLACENTAE

*Underlying pathology*

- Hypertensive Disease
- Multiple pregnancy
- Trauma
- Anaemia
- Polyhydramnios
- Short cord
- Idiopathic
Clinical Types

*Concealed  25-30%
*Revealed   65-80%
*Other:
  - Mild
  - Moderate
  - Sever abruption
Classification of Abruption Placentae

- External Abruption
- Relatively Concealed Abruption
- Concealed Abruption
### Emergency Grading of Revealed type of APH

<table>
<thead>
<tr>
<th>Grades</th>
<th>Volume Loss</th>
<th>Blood pressure (systole)</th>
<th>Symptoms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade I</td>
<td>500-1000 cc (10-15)%</td>
<td>Normal</td>
<td>Palpitation, Dizziness</td>
</tr>
<tr>
<td>Grade II</td>
<td>1000-1500 cc (15-25)%</td>
<td>Slight fall</td>
<td>Weakness, Sweating</td>
</tr>
<tr>
<td>Grade III</td>
<td>1500-2000 cc (25-30)%</td>
<td>70-80</td>
<td>Restlessness, Pallor Oliguria</td>
</tr>
<tr>
<td>Grade IV</td>
<td>2000-3000 cc (35-45)%</td>
<td>50-70</td>
<td>Collapse, Shortness of breath, Anuria</td>
</tr>
</tbody>
</table>
Abruptio Placentae

Features

- Pain and tenderness
- Often I.U.F.D
- “Hypotension on hypertension”
- Clotting defects
- Renal impairment
Differential Diagnosis

* Revealed: may present like placenta previa

* Concealed:
  * Intraperitoneal haemorrhage.
  * Ruptured uterus.
  * Acute polyhydramnious.
  * Degenerated fibroid or complicated ovarian cyst.
  * Volvolus & Peritonitis.
Diagnosis of abruptio placentae

Abdominal ultrasound is the major mean for detection of this condition.
U/S for Abruptio placenta
Complications of abruption

* **Maternal**
- Haemorrhagic shock
- Coagulopathy/DIC
- Uterine rupture
- Renal failure
- Maternal death

* **Fetal**
- Fetal Hypoxia
- Anaemia
- Growth restriction
- CNS damage
- Fetal death
Management

- Ressuscitation, IV canula, IV crystalloid solution
- Cross match blood and FFP
- Assessment of mother, put fixed catheter, CBC, urine for protein, and coagulation profile
- Assessment of fetal wellbeing, CTG
- Definitive treatment by delivery
Local & other Causes of APH

- Rupture of uterus
- Carcinoma of cervix
- Trauma
- Cervical polyp
- Bilharzia of cervix
- Edge bleed
- Haemorrhoids
Rupture of Uterus

*Two types*

1. True rupture
2. Dehiscence of scar
Rupture of Uterus

*True Rupture*
- Contractions stop
- Continuous pain
- Tender abdomen
- Fundus ill-defined
- PV Bleeding
- Fetal heart dips or absent fetal heart

*Scar Dehiscence*
- Dehiscence may be silent – no bleeding
- Fetal distress
- Haematuria
- Vague uterine outline
- Failed induction
Rupture of Uterus

• High Index of suspicion in grande multips and in scarred uteri
• All cases of Ante and Intra partum haemorrhage must exclude rupture
• Laparotomy if suspected
• Repair or Hysterectomy?
Surgical Management

- Direct suture
- Stepwise devascularisation
- Internal iliac artery ligation
- Hysterectomy
- B-Lynch, “foley tourniquet”, packing
Stepwise Devascularisation
VASA previa

- Rare event
- Umbilical cord vessels are covered only by chorion and amnion (membranes)
- Vessels are exposed and can rupture under pressure
- Baby at risk of severe bleeding and death
- May feel like a cord pulsating on VE
- May be diagnosed on colour Doppler U/S
Vasa Previa

***There are three causes typically noted for vasa previa:

1. Bi-lobed placenta
2. Velamentous insertion of the umbilical cord
3. Succenturiate (Accessory) lobe
Vasa Praevia

Exposed vessels
Vasa Previa

*Management:
- When vasa previa is detected prior to labor, the baby has a much greater chance of surviving.
- It can be detected during pregnancy with use of transvaginal sonography.
- When vasa previa is diagnosed prior to labor, elective caesarian is the delivery method of choice.
Conservative or expectant management of APH

- Hospital admission & Rest
- General assessment (Hb, coagulation screen, klenhauer test)
  - Localize the placenta.
  - Speculum exam., never do PV exam.
  - Mobilize after bleeding stops.
  - Give anti-D Ig.
- The pt. can go home if bleeding stops & pp. excluded.
- Continue ante-Natal care & check fetal wellbeing.
- At time of labour exam by U\S for final assess.
- Carry on delivery.