

## Ante partum haemorrhage

### Definition:

- Is any bleeding occurring in Preg after 24 weeks gestation and prior to birth of the baby
- 2-6% of Pregnancies. \* Leading cause of Maternal Mortality Developing WC
- D.D:

Show.

Abruptio Placentae AP  $\frac{1}{3}$  rd

Placenta praevia PP  $\frac{1}{3}$  rd.

Vasa praevia VP

Local Causes: Cervicitis, Trauma, carcinoma, uterine rupture.

Unexplained APH (Risk of PreTerm, INGR)

### 1) Placenta praevia:

placenta that has implanted into the lower segment of the uterus after 24 weeks

Classification: major  $\rightarrow$  Placenta covers the internal cervical os.



Major



Minor

minor: placenta is sited within the lower segment of uterus.

This classification replaces the older I-IV classification.

. complete or Total.

. Partial.

. Marginal.

. Low-lying (within 2cm) from internal os.

### Incidence:

1:200 to 1 in 390 Pregnancies Over 20 weeks

$\uparrow$  with increasing age, Parity and uterine scars.

Smoking, multiple pregnancies, previous uterine curettage, uterine structural anomaly, Assisted Conception.

. Single C/S  $\rightarrow$  1% placenta praevia

. 4 C/S  $\rightarrow$   $\uparrow$  10% " "

### morbidly adherent placenta 3 Types::

1. Placenta accreta:: placenta adherent to uterine wall  
4% → IF placenta previa. (No previous Scar)  
25% → IF Previous Uterine Scar.
2. Placenta increta::  
placenta invades myometrium.
3. Percreta:: ~~it~~ penetrates the ~~entire~~ entire wall Potentially growing into bladder or bowel.

PP Associated with Double Rate of Fetal

Congenital malformation CNS, GIT, CVS, Resp. S.

Fetal malpresentation.

Pre Term Premature R. m.

IUGR. Velamentous cord insertion. VP.

### Diagnosis:

History:: Acute painless vaginal bleeding with bright red.

~ 34 weeks. (1st attack)

1/3 rd develop before 30w

1/3 rd = after 36w

Recurrent. Causeless.

(Ex):: vitals. Abdo E. Soft abdomen, Presenting Part Free Cant enter pelvis.

xxxx No Vaginal Ex. or rectal. Speculum Ex To R/O Other Local Causes.

### Investigations

Vaginal U/S is gold standard for Diagnosis

CBC. Coag. P. Kleihauer. Betke Test in Rh-ve Mother

- APT Test (Not practical)

- Type and cross match.

- Keep HCT > 30%.

- Tocolytics can be considered MgSO<sub>4</sub> For steroids administration

- output:: IF No bleeding

. An adult with her to assist her.

## Management:

Delivery if severe bleeding, mature fetus, or distressed.

Minor bleeding:

- Observe ~~24h~~ For maternal & Fetal Monitoring.
- Lab studies.
- Steroids 24 - 34w.
- Rh D Ig to Rh -ve mother.

Severe bleeding - ABC

- c/s by senior obst. senior Anaesthetist

Risk of Massive pPH.

minor placenta previa within 2cm Can deliver vaginally

There is No place to insert CX cervical or use of Prophylactic Tocolytics in Pt with p.p.p.a to prevent bleeding or prolonged pregnancy

## Risk during operation:-

Anaesthesia.

Difficult delivery if Anterior placenta.

Morbidly adherent placenta.

pPH.

Hysterectomy.

## Placental abruption. (PA)

### Definition:

Is the Premature Separation of the normally implanted Placenta From the Uterine wall due to maternal / uterine bleeding into Decidua basalis

A) Revealed B) Concealed.

### Epidemiology

- 1 in 75 to 1 in 225 births
- previous history  $\xrightarrow{\text{Risk}}$  5%  $\rightarrow$  17%
- Two " "  $\rightarrow$  25%
- Incidence of Stillbirth 7% in future pregnancy due P.A.

### Etiology, history.

- Vaginal bleeding, ~~profuse~~ Vary in amount.
- Forceful, Tetanic uterine contraction  $\rightarrow$  is chemic   
 Continuous pain abdominal pain

### Etiology

- $\uparrow$  Age,  $\uparrow$  Parity,  $\uparrow$  B.P. Cocaine use, Tobacco   
 ( $\uparrow$  2.5 fold.)
- Chorioamnionitis and Trauma.
- Idiopathic, placenta implants with submucous fibroid.
- Rapid changes in intra-uterine volume  $\rightarrow$  ROM or amnioreduction with Polyhydramnios or during Labor of Multiple Pregnancy.
- Thrombophilias  $\rightarrow$   $\uparrow$  risk of abruption.

### O/G

B.P. Tender uterus, hard <sup>woody feel</sup>  $\pm$   $\uparrow$  in Size (bloody)   
 CTG non reassuring or Fetal Death

Asses vaginal bleeding (by Speculum Ex)

Defec Digital Exam until P.P + VP R/S.

(Dx) Examination is

U/S ~~IN~~sensitive to diagnose P.A.

U/S TO R/P placenta previa.

### Complications

- hemorrhagic Shock  $\rightarrow$  Renal tubular necrosis
- DIC (10-30% IUFD)
- Couvelaire's uterus  $\rightarrow$  Extravasation of blood directly into the uterine muscle  $\rightarrow$  massive PPH.
- Fetal hypoxia or Death.

### Investigation

CBC. Plate  $< 100,000/\text{ml}$   $\rightarrow$  Severe.  
CXM blood  
PT, APTT.  
Fibrinogen  $< 200\text{mg/dl}$   $\rightarrow$  Severe.

### Management

- ABC.
- Aim HCT  $> 25\%$  Plate  $> 60,000$  Fibrinogen  $> 150$
- Dead fetus  $\rightarrow$  Aim vaginal Delivery.
- a-line  $\rightarrow$  C/S.

### bleeding grading:-

- ① Spotting: Staining, streaking or blood spotting noted
- ② minor haemorrhage  $< 50\text{ml}$
- ③ Major "  $50 - 1000\text{ml}$ . No signs of shock.
- ④ massive  $> 1000\text{ml}$  and/or signs of clinical shock.  
 $\uparrow$  Pulse  $\downarrow$  B.P

### CAN APH prevented:

- $\rightarrow$  Smoking and Cocaine, amphetamine cessation.
- $\rightarrow$  Folic acid supplementation
- Aspirin  $\pm$  LMW heparin in Thrombophilia

There is limited evidence to support intervention to prevent APH.

- $\rightarrow$  Domestic Violence in pregnancy may result in APH.

Unexplained APH: Risks of PreTerm L, Smaller

Management of pt known to be at high risk of haemorrhage should be in centres with facilities of blood transfusion in case.

Senior obstetrician  
Senior Anaesthetist  
Senior Neonatologist } Needed in APH.

Vasa praevia: 1:1000 and 1:5000 pregnancies. Rare. Catastrophic for fetus.

- Rupture of fetal blood vessels running within the membranes, often near to cervical os and damaged when rupture of membranes.

- Fetal blood lost  $\rightarrow$  high risk of Death 60%.

CTG will show abnormalities  
Tachycardia then deep decelerations or sinusoidal pattern.

Risk group {  
• placenta praevia.  
• velamentous placenta.  
• multiple preg.  
R: C/S.

- Apt's Test not used.

- Dx during pregnancy color doppler US  $\rightarrow$  97% survival rate.

Apt's Test

To Evaluate whether vaginal blood is from mother or fetus. Collect blood + NaOH  $\rightarrow$  Fetal Hb resistant to base  $\rightarrow$  Remain Pink.  
maternal will oxidize  $\rightarrow$  brown.