- CASE 1
- A 32-year-old multigravida at 31 weeks gestation is admitted to the obs dept after a motor-vehicle acci-dent. She complains of sudden onset of moderate vaginal bleeding for the past hour. She has intense,constant uterine pain and frequent contractions. Fetal heart tones are regular at 145 beats/min. On in-spection her perineum is grossly bloody
- Diagnosis, investigations & management.?

- CASE 2
- A 34-year-old multigravida at 31 weeks gestation comes to the obs dept stating she woke up in themiddle of the night in a pool of blood. She denies pain or uterine contractions. Examination of the uterusshows the fetus to be in transverse lie. Fetal heart tones are regular at 145 beats/min. On inspection herperineum is grossly bloody.
- Diagnosis. ?
- Investigation & management?

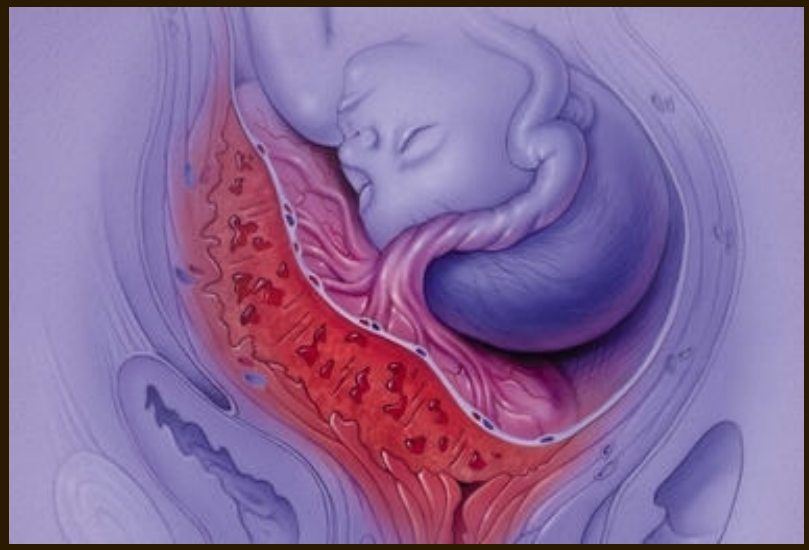
ANTEPARTUM HAEMORRHAGE

- Antepartum haemorrhage is defined as bleeding from genital tract after foetal viability and before delivery
- Viability ---28 weeks onwards
- Due to improvements in foetal survival
  - WHO – 22 weeks
  - UK – 24 weeks
- It complicates 2-5% of all pregnancies , and lead to a high foetal and maternal mortality and morbidity

CAUSES

- Placenta previa
- Abruptio placenta
- Circumvallate placenta
- Vasa praevia
- Unclassified or intermediate haemorrhage
- Local causes: polyp , ca cervix, varicose veins local trauma

PLACENTA PREVIA



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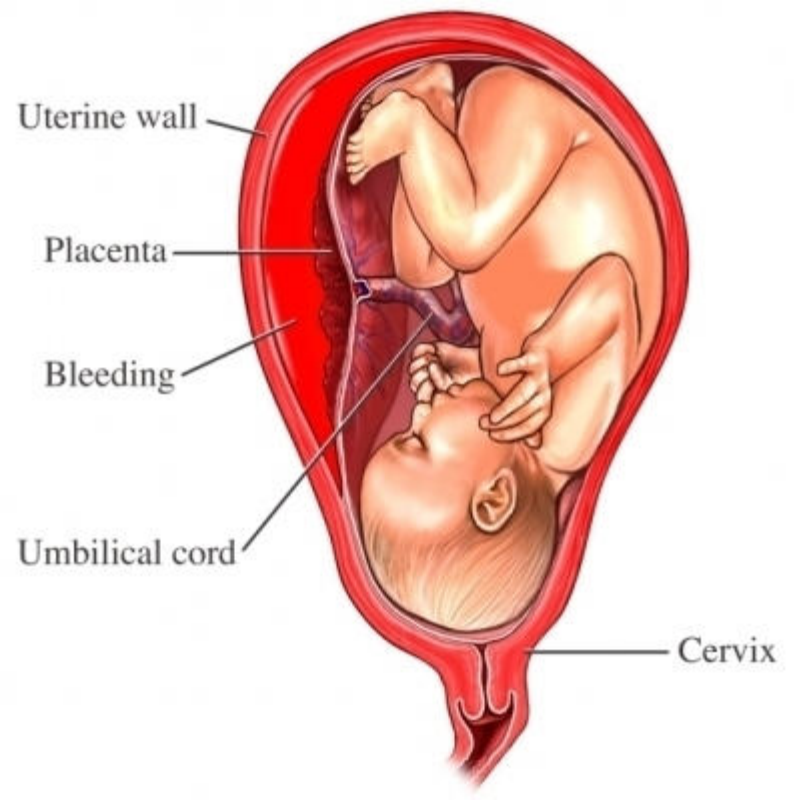
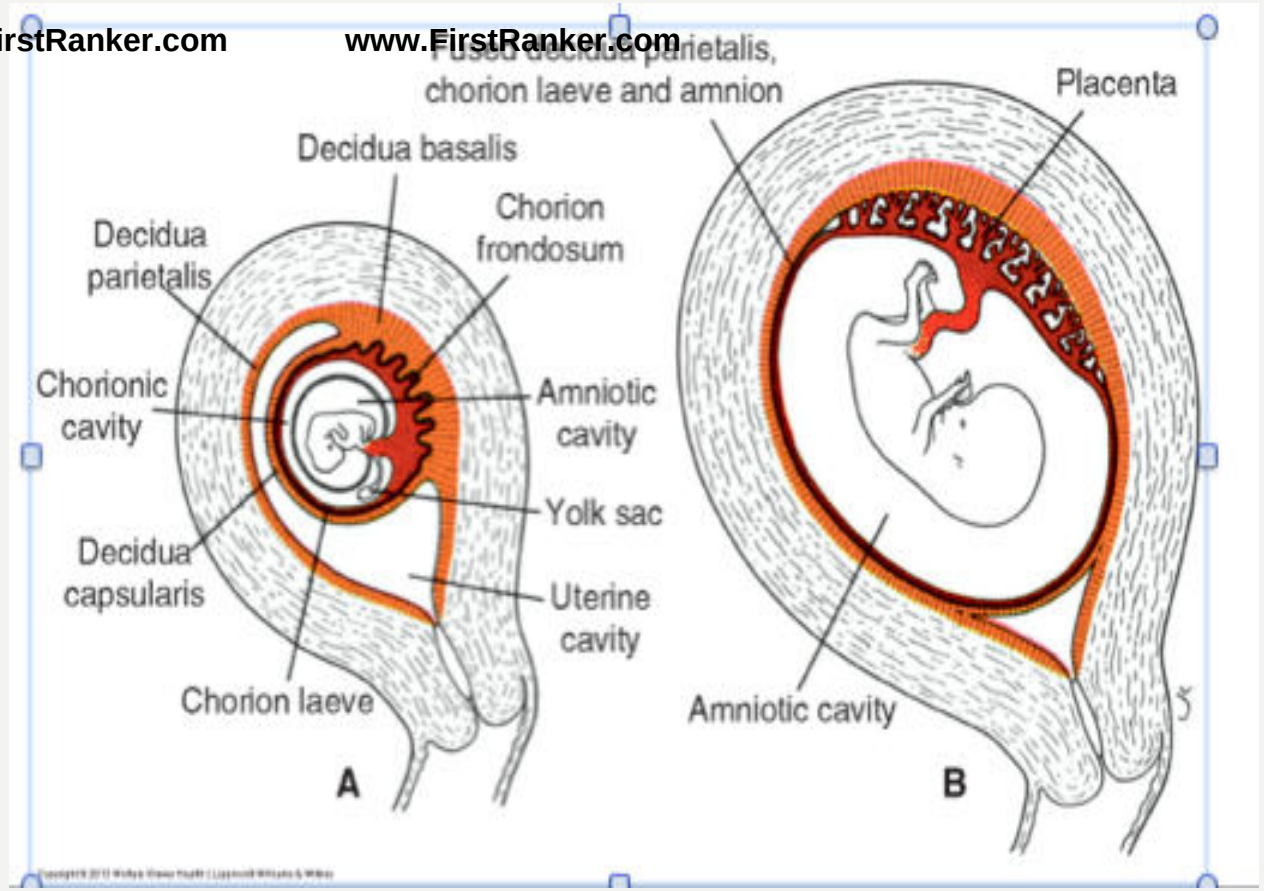




- Placenta praevia is defined as a placenta located partly or completely in the lower uterine segment
- The bleeding is called *inevitable or unavoidable haemorrhage* as dilation of internal os inevitable results in haemorrhage
- Incidence 1 in 300

AETIOLOGY

- it has been suggested that damage to endometrium or myometrium can predispose to a low implantation & subsequent implantation of placenta praevia
  - Prior surgery on uterus
    - CS , myomectomy ,D & C
  - Infection or chorioamnionitis
  - Previous placenta praevia
  - Advanced maternal age
  - Multiparity ,multiple pregnancy , malpresentations , smoking

PATHOGENESIS

Risk factor

↓

Defective placental migration\large placenta

↓

Low lying placenta

↓

Separation of placenta during formation of lower uterine segment & dilation of internal os

↓

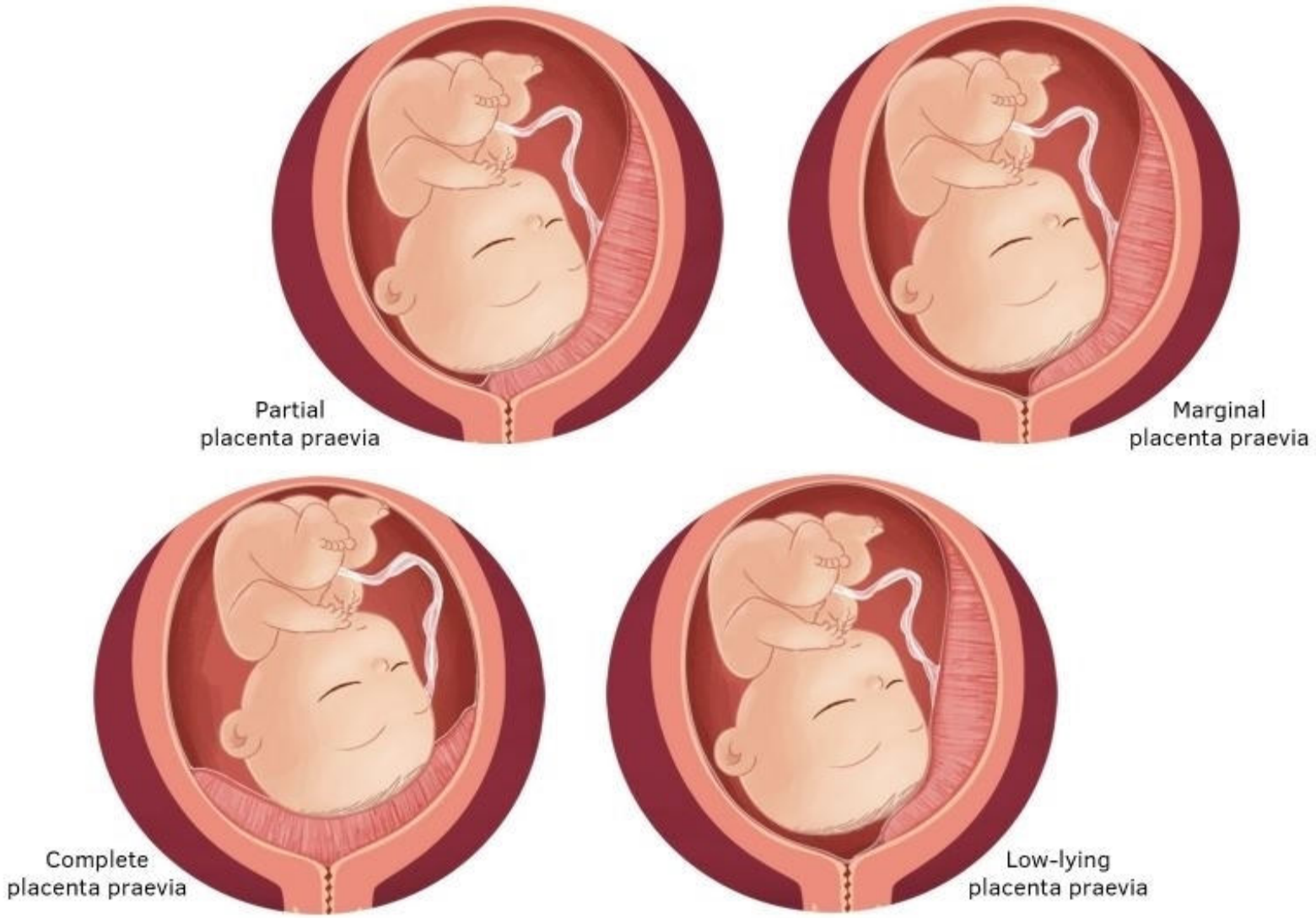
Inability of the lower uterine segment to contract

↓

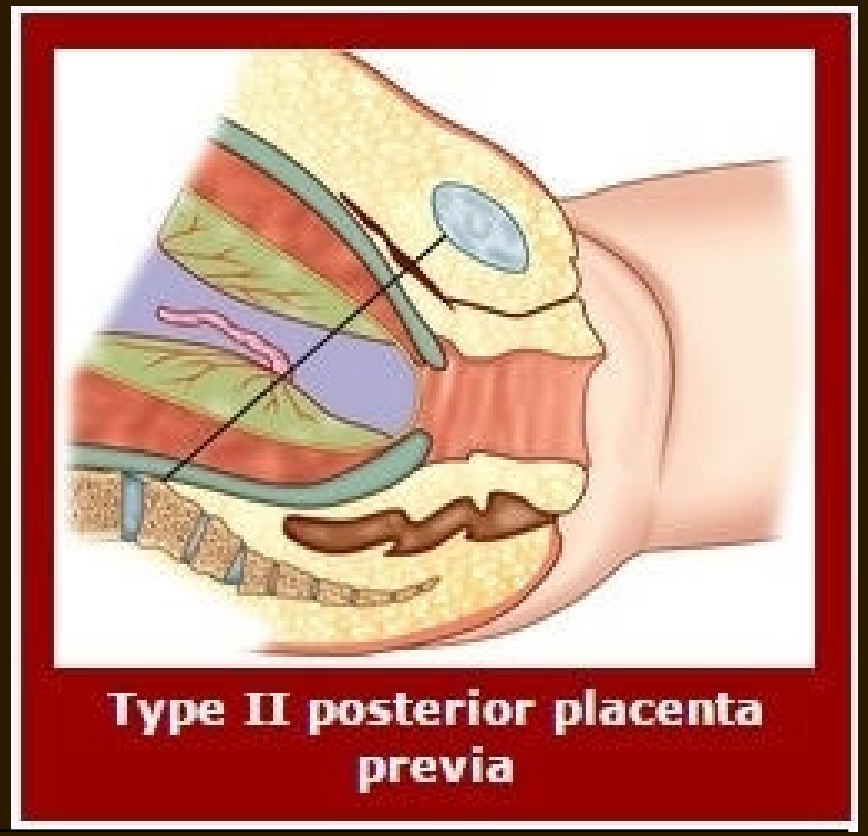
bleeding

CLASSIFICATION

Type 1	• Low lying placenta or lateral placenta praevia ,the placenta edge does not reach internal os but is in close proximity
Type 2	• Marginal placenta praevia, placental edge reaches the margin of internal os ,but does not cover it
Type 3	• Partial or incomplete central placenta praevia • Placenta covers internal os when closed ,but only partially when the os is dilated
Type 4	• Total ,central or complete placenta praevia • Placenta covers internal os even on dilation



- Type 1 & 2 → minor
- Type 3 & 4 → major
- Placenta can be anterior or posterior
- Type 2 posterior placenta is called dangerous type as it is likely to be compressed between foetal head & sacral promontory



CLINICAL FEATURES

- SYMPTOMS
  - Painless and recurrent bouts of antepartum haemorrhage
- SIGNS
  - Pallor [proportionate to bleeding]
  - Size of uterus corresponds to period of amenorrhoea
  - Uterus soft & non tender
  - Malpresentation common ‘if cephalic head is usually floating
  - Foetal parts can be felt in anterior placenta & difficult in posterior placenta
  - foetal heart sound usually heard
  - Stallworthy`s sign : slowing of heart rate on pressing the head down into the pelvis & prompt recovery on release
  - Vaginal examination should not be done

DIFFERENTIAL DIAGNOSIS

- All causes of antepartum haemorrhage

Table 21–3 Differential Signs and Symptoms of Placenta Previa and Abruptio Placentae

	Placenta Previa	Abruptio Placentae
Onset	Quiet and sneaky	Sudden and stormy
Bleeding	External	External or concealed
Color of blood	Bright red	Dark venous
Anemia	= to blood loss	Greater than apparent blood loss
Shock	= to blood loss	Greater than apparent blood loss
Toxemia	Absent	May be present
Pain	Only labor	Severe and steady
Uterine tenderness	Absent	Present
Uterine tone	Soft and relaxed	Firm to stony hard
Uterine contour	Normal	May enlarge and change shape
Fetal heart tones	Usually present	Present or absent
Engagement	Absent	May be present
Presentation	May be abnormal	*No relationship*

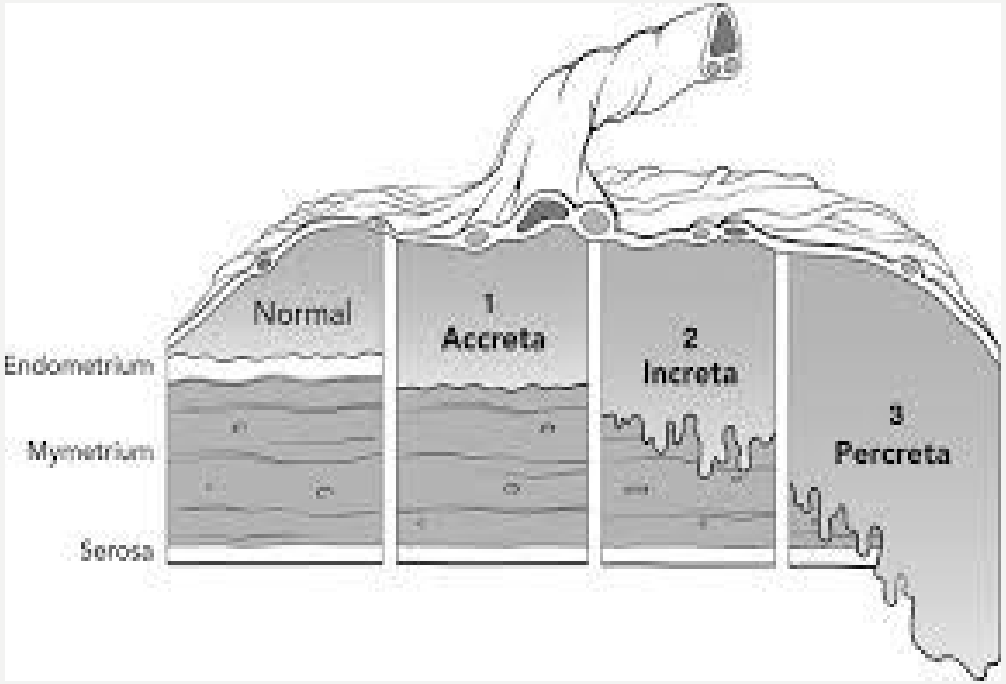
Source: Oxorn, H. (1986). *Human labor and birth* (5th ed., p. 507). Norwalk, CT: Appleton & Lange.

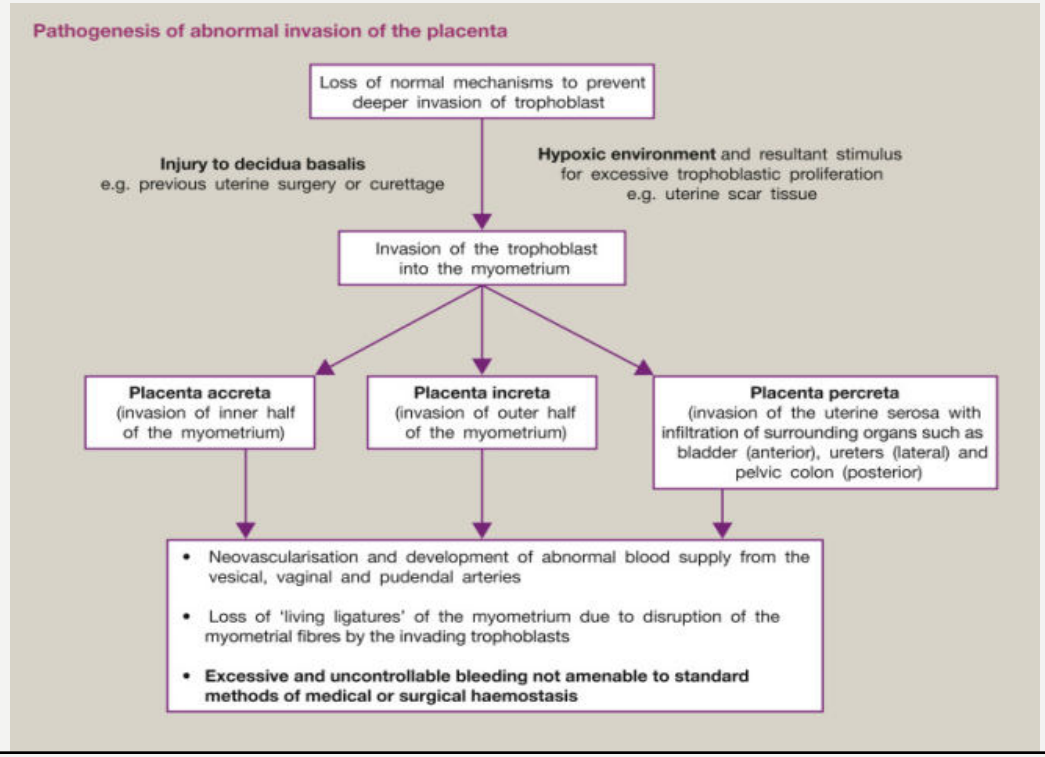
COMPLICATIONS

- MATERNAL
  - Shock due to haemorrhage
  - Increased chance of cs
  - Postpartum haemorrhage
  - Morbidity adherent placenta
    - Placenta accreta
    - Placenta increta
    - Placenta percreta
- FOETAL
  - prematurity
  - Hypoxia due to placental separation

MORBIDITY ADHERENT PLACENTA

- The placenta is adherent to the uterine wall due to partial or total absence of decidua basalis and fibrinoid layer (Nitabuch layer)





- Thank you