Malpresentation
- Presentation: is the lowest pole of the fetus that presents to the lower uterine segment and the cervix
- Normal presentation is vertex
**malpresentations**: Any presentation other than the vertex, that is, breech, brow, face or shoulder

**Aetiology:**
- contracted pelvis
- large baby
- Polyhydramnios
- multiple pregnancy
- low-lying placenta
- preterm labour
- anomalies of the fetus (neck tumours)
- uterus (congenital or acquired, e.g. lower segment fibroids).
Brow presentation

- the head is half extended and presents to the pelvis with the largest anteroposterior diameter (mento-vertical - 13 cm).
Figure 17-8  Four types of cephalic presentation. The vertex presentation is normal. Note postional changes of the anterior and posterior fontanels in relation to the maternal pelvis.
- The presentation may correct itself in labour by flexion and present as a vertex or undergo further extension and present as a face and may result in vaginal delivery.

- Persistence of brow presentation in labour at term, is not compatible with vaginal delivery and necessitates a CS.
In early labour, preparations should be undertaken for CS and time allowed to see whether flexion or extension would take place.

Failure to progress in the next few hours in labour with the persistence of brow presentation is an indication for CS and not for augmentation of labour with oxytocin.

Complications in labour include cord prolapse with membrane rupture and uterine rupture in neglected cases.
Face presentation:

- Face presentation is confirmed on vaginal examination when the nose, eyes and the hard gum margins are palpated.
The submento-bregmatic diameter enters the pelvis. In the vast majority it rotates forwards to be in the mento-anterior position with the chin behind the symphysis pubis.

The presenting lateral (biparietal 9.5 cm) and anteroposterior (submento-bregmatic 9.5 cm) diameters are conducive for vaginal delivery.

Descent is possible when the position is mento-anterior because of large space in the lateral sacral area.
If the face rotates to a mento-posterior position, although the diameters are the same as mento-anterior, the lateral dimensions of the frontal bones are large and do not permit descent behind the narrow retropubic arch and hence a CS is advisable.
A. Chin anterior

B. Chin posterior
Transverse Lie & Shoulder presentation:

- The baby lies with its long axis transverse in the uterus, when the shoulder is usually the presenting part.
- Should rupture of membranes take place with the fetus in the transverse lie, cord prolapse, shoulder presentation and arm prolapse are likely possibilities with progressive cervical dilatation.
Diagnosis:

- The abnormal shape of the uterus (the fundus being lower than expected), no fetal pole at the fundus or in the pelvic inlet.
In early labour an elongated bag of forewaters may be felt vaginally which could contain a limb or a loop of cord.

Neglected transverse lie will, almost inevitably lead to uterine rupture.
Management:

- If transverse or oblique lie discovered early in labour it can be corrected by external cephalic version if the membranes are intact.
- Once the lie is corrected the membranes should be ruptured & uterine contractions will maintain the longitudinal lie.
If the membranes rupture and the fetus is still in the transverse lie, CS should be performed to avoid injury to the fetus or the uterus.

In cases where the diagnosis is made late the fetus may be impacted in the transverse lie and safe delivery may be only possible by a CS with a midline vertical incision.

Labour and spontaneous vaginal delivery is possible in extreme preterm and macerated fetuses.
Cord prolapse

- Cord prolapse defined as the descent of the umbilical cord through the cervix alongside (occult) or past the presenting part (overt) in the presence of ruptured membranes.

- Cord presentation is the presence of the umbilical cord between the fetal presenting part and the cervix.
Occult (hidden) prolapse

Cord prolapsed in front of the fetal head

Complete cord prolapse

The cord cannot be seen but can probably be felt as a pulsating mass during vaginal examination.

The cord is compressed between the fetal presenting part and pelvis but cannot be seen or felt during vaginal examination.

The cord can be seen protruding from the vagina.
The overall incidence of cord prolapse ranges from 0.1% to 0.6%.

Increased perinatal mortality due to prematurity, congenital malformations & birth asphyxia.

The principal causes of asphyxia are thought to be cord compression and umbilical arterial vasospasm.
Clinicians need to be aware of the risk factors associated with umbilical cord prolapse.

Risk factors for cord prolapse

- Multiparity: Artificial rupture of membranes
- Low birth weight, less than 2.5 kg
- Prematurity
- Fetal congenital anomalies
- Breech presentation
- Transverse, oblique and unstable lie
- Second twin
- Polyhydramnios
- Unengaged presenting part
- Low-lying placenta, other abnormal placentation
Can cord prolapse or its effects be avoided?

- Cord prolapse should be suspected where there is an abnormal fetal heart rate pattern (bradycardia, variable decelerations etc), particularly if such changes commence soon after membrane rupture, spontaneously or with amniotomy.
What is the optimal initial management of cord prolapse in hospital settings?

When cord prolapse is diagnosed before full dilatation, assistance should be immediately called and preparations made for immediate delivery in theatre.

To prevent vasospasm, there should be minimal handling of loops of cord lying outside the vagina.

To prevent cord compression, it is recommended that the presenting part be elevated either manually or by filling the urinary bladder.
Bladder filling can be achieved quickly by inserting the end of a blood giving set into a Foley’s catheter. The catheter should be clamped once 500–750 ml has been instilled.

It is essential to empty the bladder again just before any delivery attempt, be it vaginal or caesarean section.
Cord compression can be further reduced by the mother adopting the knee–chest position or head-down tilt (preferably in left-lateral position).
Tocolysis can be considered while preparing for caesarean section if there are persistent fetal heart rate abnormalities after attempts to prevent compression mechanically and when the delivery is likely to be delayed.

What is the optimal mode of delivery with cord prolapse?

A caesarean section is the recommended mode of delivery in cases of cord prolapse when vaginal delivery is not imminent, to prevent hypoxia–acidosis of the baby.

If babay is dead vaginal delivery is the route if no contraindications