**Malpresentations - Dr. Sallama**

*Definition of malpresentation:* Any presentation other than vertex presentation.

**Many types:**

1. Face presentation.
2. Brow presentation.
4. Shoulder presentation.
5. Compound presentation.

**Causes of malpresentations**

1. Prematurity.
2. Multiple pregnancy.
3. Abnormal baby.
4. Polyhydramnios or oligohydramnios.
5. Congenital malformation of the uterus.
6. Placenta previa.
7. Contracted pelvis

**Face presentation**

In this condition the head is fully extended and the face is the presenting part. Incidence: about once in 500 labours.

*Causes:*

1. Abnormal baby e.g. anancephaly.
2. Congenital tumors of the neck causes extended head.
3. Contracted pelvis.
4. Prematurity.
5. Multiple pregnancy.
6. Presence of several loops of cord around the neck.
7. Most face presentations are secondary occurs during labour as a result of increased extension of the head.

**Mechanism of labour**

The chin is the denominator. Four positions present:

- Right mento-anterior.
- Left mento-anterior.
- Left mento-posterior.
- Right mento-posterior.

Mento-anterior positions are more common (80% of cases).

In a mento-anterior position:

- The head engages and descend with increasing extension.
- So the sub-mento-bregmatic diameter (9.5cm) comes through the cervix.
- When the chin reaches the pelvic floor it undergoes internal rotation through one-eighth of a circle.
- So the submental region comes to lie under the subpubic arch.
- The head born by a movement of flexion.
- Restitution occurs and is followed by external rotation as in vertex presentation.

In mento-posterior position:

- Similar mechanism occurs, except that the chin undergoes internal rotation through three-eighths of a circle.
- If the head undergoes backwards rotation there will be persistent mento-posterior position
- This position is incompatible with vaginal delivery.
- This is because the head is already fully extended so further extension to deliver the head is impossible.
- This result in obstructed labour and need assisted delivery by caesarian section.

Diagnosis:

- Abdominal examination:
  - With mento-posterior position the cephalic prominence is felt very easily to overlap the symphysis pubis.
  - It is felt on the same side of the back and separated from it by deep sulcus.
  - It may be difficult to locate and hear the fetal heart sounds.
- With mento-anterior position:
  - The cephalic prominence is difficult to feel because it lie posteriorly.
  - The fetal heart sounds are easily heard over the chest.
- Vaginal examination:
  - Early in labour:
    - The presenting part is usually high.
    - There may be early rupture of membranes.
  - When labour is well established, the landmarks are:
    - Mouth, jaws, nose, malar and orbital ridges.
    - The presence of alveolar margins distinguishes the mouth from the anus in breech presentation.
    - One should avoid damaging the eyes during vaginal examination.
    - Vaginal examination should include a thorough search for cord presentation or prolapse.
Prognosis:

- Many face presentations are delivered naturally without difficulty.
- Face presentation is less favorable than vertex because the face is a less efficient dilator of the cervix.
- The diameter which emerges through the outlet is the sub-mento-vertical (11 cm) which is larger than the vertex presentation.

Management of labour and delivery:

- The woman is kept in bed during the 1st stage.
- Once membranes ruptured, vaginal examination should be done to exclude cord prolapse.
- When the cervix becomes fully dilated, and the head reaches the pelvic floor, an episiotomy should be done especially in primigravida to avoid tearing of the perineum.
- In mento-anterior position
  - Spontaneous vaginal delivery is expected.
  - If there is delay in the 2nd stage forceps can be applied (by experienced obstetrician)
- With mento-posterior position:
  - Time should be allowed for spontaneous rotation to anterior position take place (which happened in 45-65% of cases).
  - This usually happened late in the 2nd stage.
  - If spontaneous rotation does not occur then Caesarian section done to reduce fetal and maternal morbidity.
- Other indications of caesarian section are:
  1. Contracted pelvis.
  2. Big baby.
  3. Cord prolapse.
  4. Failure of descend of the presenting part in first or 2nd stage of labour.
- After delivery the face is usually swollen and discolored.
- This is temporarily and complete recovery is usual after few days.

Brow presentation:

- In brow there is partial extension of the head.
- Incidence: about one in 1050.
- Causes: The same as face presentation.
- Extension of the head before labour called primary extension.
- Extension during labour termed secondary extension.
- Brow presentation is usually transient.
- With uterine contraction the head either undergoes more flexion and change to vertex presentation.
- Or further extension and change to face presentation.
- Persistent brow presentation is fortunately rare.
Brow presentation: In brow presentation the diameter which present is the mento-vertical which measure 13 cm.

- In brow presentation the diameter which present is the mento-vertical which measure 13 cm.
- Such long diameter cannot engage and if persist obstructed labour would result.
- So there is no place for vaginal delivery in persistent brow presentation.
- Only if the head is quite small in proportion to the pelvis it may be engaged and born as brow.

**Diagnosis:**

- Brow presentation can be diagnosed by ultrasound antenatally.
- Brow presentation should always be suspected when there is non-engagement of the fetal head in labour especially in woman who has had previous easy deliveries.
- As a rule there is early rupture of the membranes.
- On vaginal examination:
  - The presenting part is usually high.
  - The landmarks felt are:
    1. The anterior fontanells,
    2. Frontal suture.
    3. Forehead.
    4. The orbital Ridges.
    5. The bridge of the nose.

**Management**

- When brow diagnosed ante-natally by ultrasound and there is no evidence of disproportion or any other abnormality, nothing should be done as in most cases the head will flex during labour.
- If the head is discovered to be partially extended in early labour and there is no evidence of disproportion a short trial of labour is permitted, and this may result in further extension of the head to face presentation.
- If there is persistent brow caesarian section should be done as vaginal delivery is impossible.
Compound presentation:

- Compound presentation mean prolapse of fetal extremity alongside the presenting part. It is three types:
  1. Prolapse of the hand in cephalic presentation (which is the most common).
  2. Prolapse of upper extremity in breech presentation
  3. Prolapse of a lower extremity in cephalic presentation (is relatively rare).
- Compound presentations uncommon occur in only 1 in 1000 pregnancies.

Causes:

Any factors that prevent descent of the presenting part into the pelvic inlet predispose to prolapse of extremity alongside the presenting part e.g.

  1. Prematurity.
  2. Cephalo-pelvic disproportion.
  3. Multiple gestations.
  4. Grand Multiparity (more than five deliveries).
  5. Hydramnios (excessive amount of amniotic fluid).

Cord prolapse is common occurring in about 11-20% of cases of compound presentation.

Diagnosis:

- The diagnosis usually made during labour by vaginal examination when the cervix dilated the prolapsed extremity can be felt alongside the head or breech.
- Compound presentation should be suspected when there is poor progress in labour especially when the fetal head fails to engage during the active phase.

Management:

This depends on:

  1. Gestational age.
  2. Type of presentation.

- In cephalic presentation with prolapsed hand. Labour can be allowed and vaginal delivery anticipated as the hand will move upward into the lower uterine segment as the vertex descends into the birth canal.
- Other compound presentations are treated by c/s.
- There is a risk of umbilical cord prolapse and continuous fetal heart monitoring should be done to detect fetal distress which should be treated by immediate caesarian section.