Fetal Malposition

Presented By:
مصطفى صالح موسى
ليث امجد سعید

Supervised By:
د. سعاد الخشاب
Fetal malposition

- This refers to the relationship between the denominator & the pelvis that make spontaneous delivery unfavourable, e.g:
  - occipito-posterior in vertex presentation
  - sacro-posterior in breech presentation &
  - mento-posterior with face presentation.
Occipitoposterior positions

- Occipitoposterior positions are the most common type of malposition of the occiput.
- A persistent occipitoposterior position results from a failure of internal rotation prior to birth. The vertex is presenting, but the occiput lies in the posterior rather than the anterior part of the pelvis.
- As a consequence, the fetal head is deflexed and larger diameters of the fetal skull present.
(A) Right occipitoposterior position.

(B) Left occipitoposterior position.
Etiology

The direct cause is often unknown, but it may be due to:

1. associated with an abnormally shaped pelvis.
2. A flat sacrum or a head that is poorly flexed may be responsible
3. epidural analgesia (relax the pelvic floor to an extent that the fetal occiput sinks into it rather than being pushed to rotate in an anterior direction)
4. poor uterine contractions may not push the head down into the pelvis strongly enough to produce correct rotation
Diagnosis

Antenatal diagnosis

1 - Listen to the mother

- The mother may complain of backache and she may feel that her baby’s bottom is very high up against her ribs. She may report feeling movements across both sides of her abdomen.
2 - Abdominal examination:

On inspection:

- There is a saucer-shaped depression at or just below the umbilicus. This depression is created by the ‘dip’ between the head and the lower limbs of the fetus. The outline created by the high, unengaged head can look like a full bladder.
On palpation:

• The breech is easily palpated at the fundus, the back is difficult to palpate as it is well out to the maternal side, sometimes almost adjacent to the maternal spine.

• Limbs can be felt on both sides of the midline.
On auscultation:

- The fetal back is not well flexed so the chest is thrust forward, therefore the fetal heart can be heard in the midline.
- However, the heart may be heard more easily at the flank on the same side as the back.
Diagnosis during labours

- The woman may complain of continuous and severe backache worsening with contractions.
- However, the absence of backache does not necessarily indicate an anteriorly positioned fetus.
- The large and irregularly shaped presenting circumference does not fit well onto the cervix.
Therefore the membranes tend to rupture spontaneously at an early stage of labour and the contractions may be incoordinate. Descent of the head can be slow even with good contractions.

The woman may have a strong desire to push early in labour because the occiput is pressing on the rectum.
Vaginal examination

• The findings will depend upon the degree of flexion of the head; locating the anterior fontanelle in the anterior part of the pelvis is diagnostic but this may be difficult if caput succedaneum is present.

• The direction of the sagittal suture and location of the posterior fontanelle will help to confirm the diagnosis {The posterior fontanelle (three radiating sutures) is palpable posteriorly}
Management of labour:

- The best management is to await events, preparing the woman and staff for a long labour.
- Progress should be monitored by abdominal and vaginal assessment, and the mother’s condition should be watched closely.
- Good pain relief with an epidural and adequate hydration are required.
First stage:

- The first stage is managed as in normal position with partogram & analgesia.
- Inefficient uterine contraction is managed with syntocinon drip. If prolonged labour or fetal distress occur c/s is performed.
Second stage:

In most cases provided that uterine contractions are strong & the patient is able to make good expulsive efforts, the occiput rotate forward & normal delivery take place. In other cases the baby may be delivered face to pubis with great risk of perineal tear.

The indications of interference are:
1-failure of presenting part to descend.
2-fetal distress.
3-maternal distress.
• So in the second stage to assist delivery is by rotation of fetal head to the occipito-anterior position, these methods also used in deep transverse arrest of the head.

• **Rotation is:**
  1. Manually
  2. Or with kielland forceps
  3. Or with vaccum extractor
1 ~ Manual rotation

With epidural or general anesthesia or pudendal block the head is rotated with the hand in the vagina til it directed anterior, the shoulder girdle is rotated at the same time by pressure through abdominal wall with the external hand & delivery is completed with obstetric forceps.
2 ~ Kielland forceps

This forceps used for rotation of the fetal head until the occiput lies anteriorly & then for traction.
3 - Vacuum extraction

- If the extractor is applied near the occipital end of the vertex & traction is applied, forward rotation of the head often occurs.

- When there is doubt about vaginal delivery a trial of forceps in the operating theatre is performed, this may occur in:
  - The baby seems large
  - Two fifth of head is abdominally palpable
  - Marked caput or moulding
  - Prominent ischial spines
• If any difficulty is encountered, caesarean section is performed.
Occipito-transverse position

- The baby is facing the hip.
- The head engages in the left or right occipito-transverse position, but then rotation to occipito-anterior will occur.
- If this fails to occur the head remains in the transverse position in the second stage causing deep transverse arrest.
• the occiput transverse position is most likely a transitory one because the occiput tends toward the anterior position.
• Unless hypotonic uterine contractions result, either spontaneously or as the consequence of regional analgesia, spontaneous anterior rotation usually is completed rapidly, thus allowing the choice of spontaneous delivery or delivery with outlet forceps.
Delivery

- If rotation ceases because of poor expulsive forces and pelvic contractures are absent, vaginal delivery usually can be accomplished readily in a number of ways:

- The occiput may be **manually rotated** anteriorly or posteriorly and forceps delivery performed from either the anterior or posterior position.
• Alternatively, clinicians may apply **Kielland forceps** to the fetal head in the occiput transverse position, rotate the occiput to the anterior position, and then deliver the head either with the same forceps or with Simpson or Tucker–McLane forceps.

• If failure of spontaneous rotation is caused by hypotonic uterine contractions without cephalopelvic disproportion, **oxytocin** may be infused and closely monitored.
• The genesis of the occiput transverse position is not always so simple, or the treatment so benign.

• With the platypelloid (anteroposteriorly flattened) and the android (heart-shaped) pelves, there may not be adequate room for rotation of the occiput to either the anterior or the posterior position.
• With the android pelvis, the head may not even be engaged, yet the scalp may be visible through the vaginal introitus as the consequence of considerable molding and caput formation.

• Consequently, if forceps delivery is attempted, undue force should be avoided.
Thank you