Fetal Malposition

By

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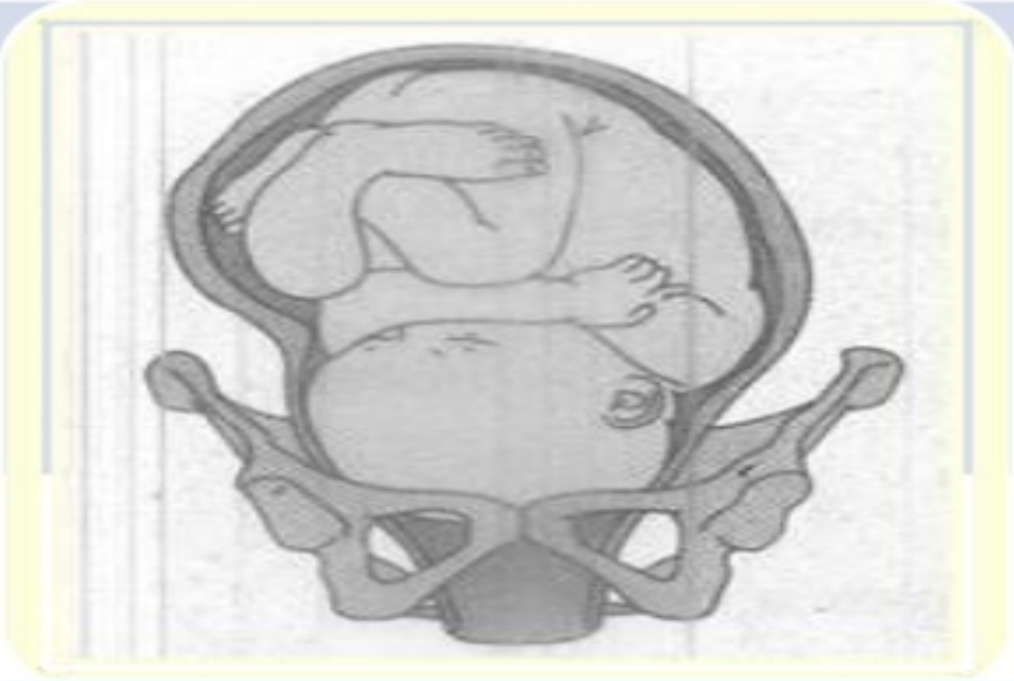
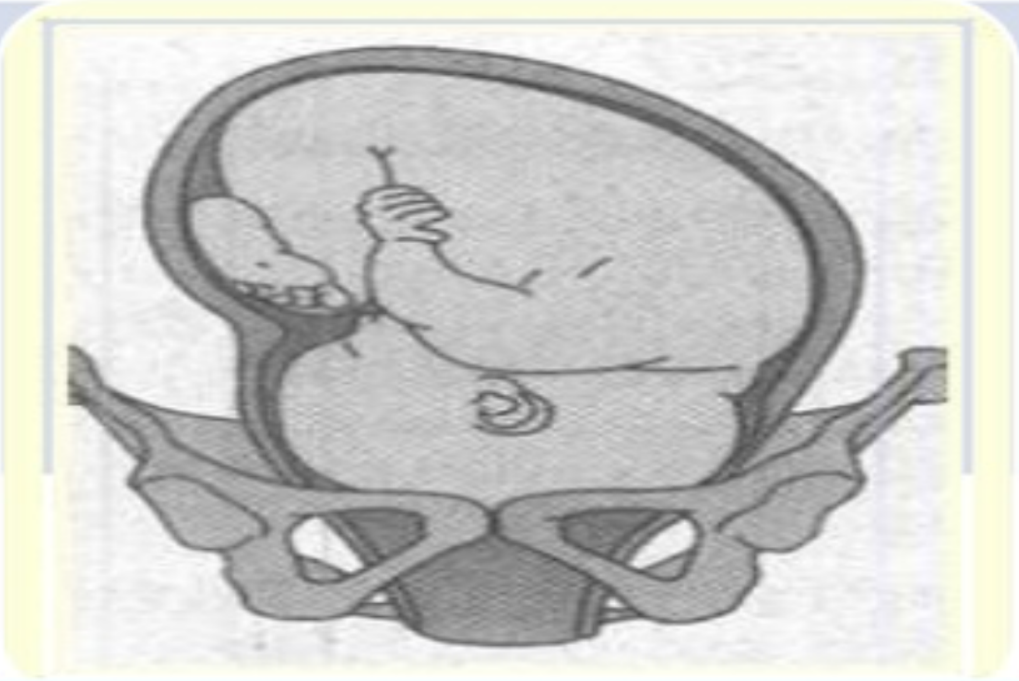
MALPOSITION

Malpositions include occipitoposterior and occipitotransverse positions of fetal head in relation to maternal pelvis.



Occiput Posterior

Arrested labor may occur when the head does not rotate and/or descend. Delivery may be complicated by perineal tears or extension of an episiotomy.



Occiput Transverse

It is the incomplete rotation of OP to OA results in the fetal head being in a horizontal or transverse position (OT).

A Right occipitoposterior position

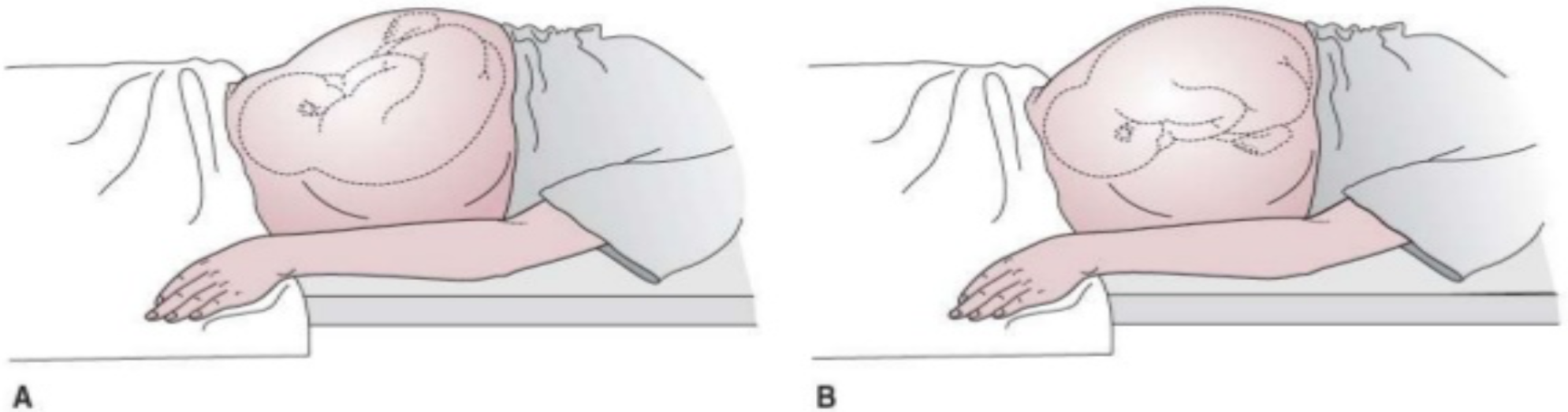
B Left occipitoposterior position

Factors that favour malposition

- Pendulous abdomen- in multiparae
- Anthropoid pelvic brim- favours direct O.P/O.A
- Android pelvic brim
- A flat sacrum-transverse position
- The placenta on the ant. uterine wall
- R.O.P

How to diagnose?

- Palpation
  - Fetal back is found to one side or may be difficult to identified.
  - The fetal head is posterolateral and will be free above the brim.
- Auscultation
  - The fetal heart best heard in the flank but descends to just above the pubis as the head rotates and descends.
- VE
  - the membrane tend to ruptured early before the labour is establish if the membrane is intact they may protrude through the cervix giving finger-like forewaters.



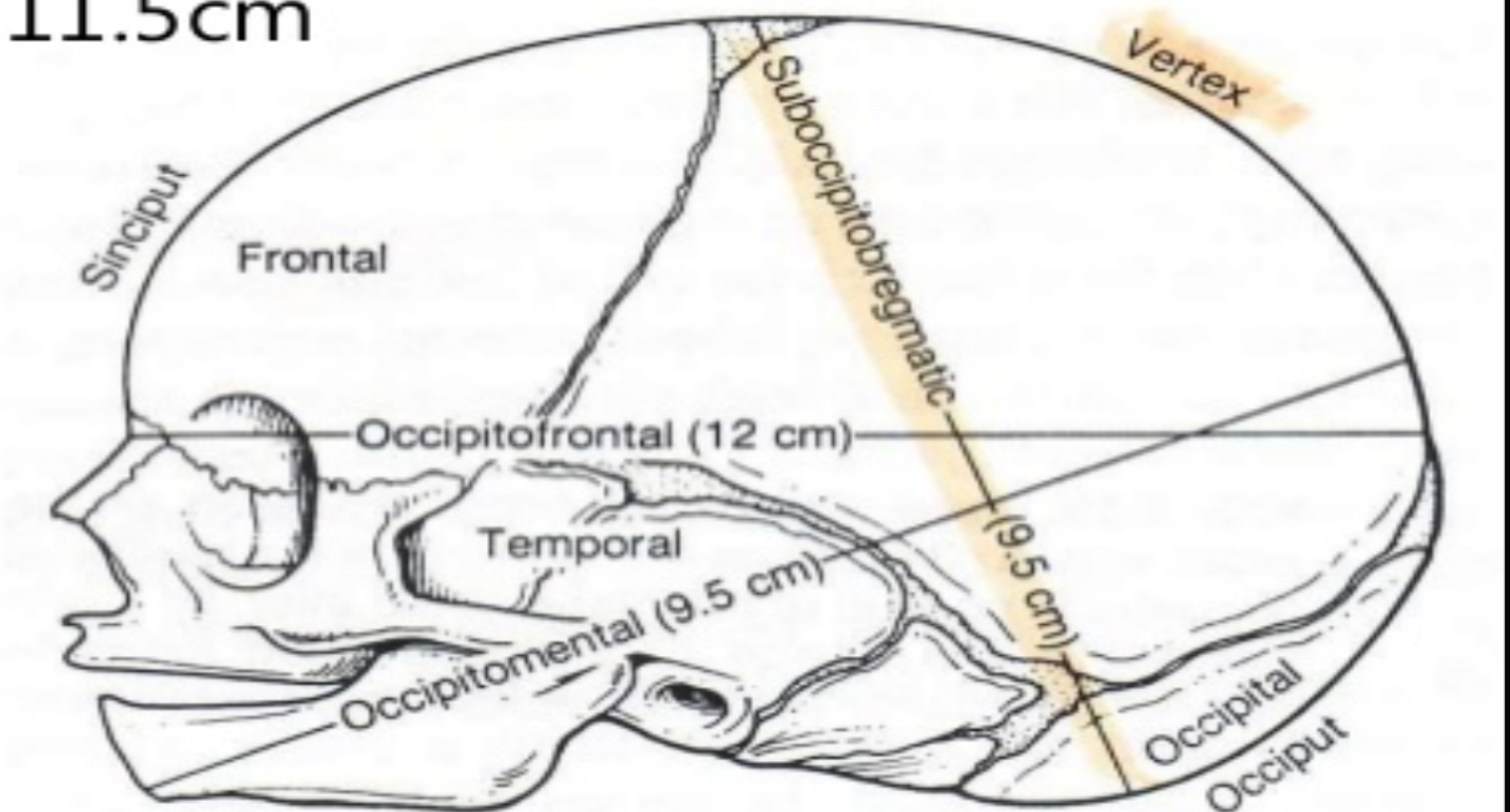
Comparison of abdominal contour in (A) posterior and (B) anterior positions of the occiput

Mechanisms of delivery of ROP

1. Long Anterior Rotation of 3/8th of circle anteriorly to direct occipitoanterior….SVD in 60%.
2. Anterior Rotation of 1/8th of circle (45°)→Deep transverse arrest……(rotation with ventouse or with Kielland forceps may end with delivery otherwise Cesarean section.)
3. Rotation of 1/8th of circle posteriorly to be direct occipitoposterior…may deliver as face to pubis (generous episiotomy as the diameter of delivery is occipitipofrontal =11.5cm) or need Cesarean section.
4. It may persists as occipitoposterior, to be delivered by Cesarean section.

ENGAGING DIAMETERS

- Suboccipitofrontal diameter in a deflexed head is 10.5cm
- Occipitofrontal diameter in a head which is further deflexed is 11.5cm



Management of labour cont..

First stage: In uncomplicated cases, the labour is allowed to proceed in a manner similar to normal labour.

- Intravenous infusion is started.
- Progress of labour is judged
- Weak pain, persistence of deflexion and nonrotation of the occiput are the triad too often coexistent. In such situation, oxytocin infusion is started for augmentation of labour.
- Indication of caesarean section arrest of labour, incoordinate uterine action, fetal distress.

Management of labour cont..

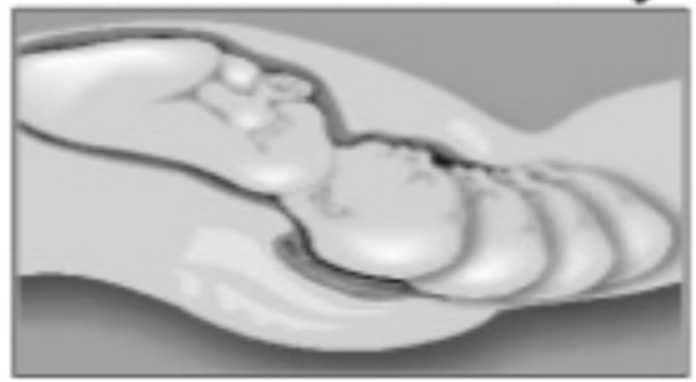
Second stage: In majority anterior rotation of the occiput is completed and the delivery is either spontaneous or can be accomplished by low forceps or ventouse.

- In minority: watchful expectancy for anterior rotation of the occiput and descent of the head.
- In occipito-sacral position, spontaneous delivery of face to pubis may occur.

Third stage:

- Tendency of PPH can be prevented by prophylactic IV ergometrine 0.25 mg with the delivery of anterior shoulder.
- Following vaginal delivery meticulous inspection of the cervix and lower genital tract should be made to detect any injury.

Mechanism of delivery of DOP



Delivery of the head in DOP in FLEXION

Forceps Delivery

Vacuum Extraction

Deep transverse arrest

- The head is deep into the cavity, the sagittal suture is placed in the transverse bipsinous diameter and there is no prognosis in descent of the head even after ½ -1 hour following full dilatation of cervix.

- May be end result of incomplete anterior rotation of the oblique OPP, or it may be due to non rotation of the commonly primary occipito transverse position of normal mechanism of labour.

Deep transverse arrest cont...

Causes:

- Faulty pelvic architecture
- Prominent ischial spine,
- Flat sacrum and convergent side walls,
- Deflexion of head,
- Weak uterine contraction,
- Laxity of the pelvic floor muscles.

Diagnosis

- Head is engaged
- Sagittal suture lies in transverse bispinous diameter,
- Anterior fontanelle is palpable,
- Faulty pelvic architecture may be detected.

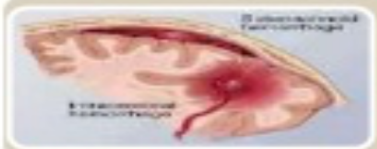
Deep transverse arrest cont...

Management:

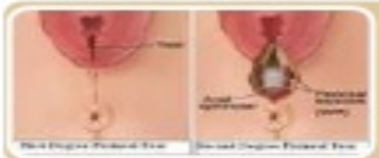
- Vaginal delivery is found safe.
- Ventouse
- Manual rotation and application of forceps
- Forceps rotation and delivery with Keilland in hands of an expert.
- Vaginal delivery is not safe: caesarean section.
- Craniotomy in dead pelvis.

Complications

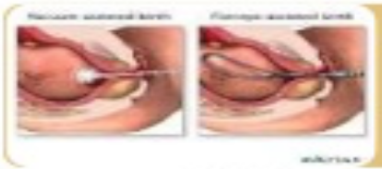
Obstructed labour



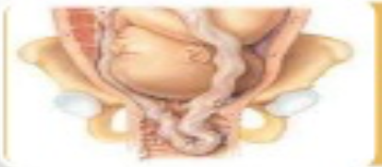
Cerebral hemorrhage



Maternal trauma



Neonatal trauma



Cord prolapse

Thank you