



**Academic year 2021-2022**  
**5<sup>th</sup> year**

## **REPRODUCTIVE BLOCK**

**Lecture**

**Duration : 1 hour**

### **FETAL MALPOSITION**

*Presented by*  
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**GYNAECOLOGY 20th**  
**EDITION by Ten Teachers**



## **Learning Objectives (LO)**

- 1- Definition of Malposition**
- 2- Recognizing occipital-posterior position , etiology and diagnosis .**
- 3-Management of occipital-posterior position**
- 4-Recognizing Deep Transverse arrest of the fetal head , diagnosis and management**
- 5-Types of face presentation .**
- 6- diagnosis and management of face presentation**
- 7- definition of brow presentation and mechanism of labor**
- 8- diagnosis and management of brow presentation**



# LO 1

## Definitions

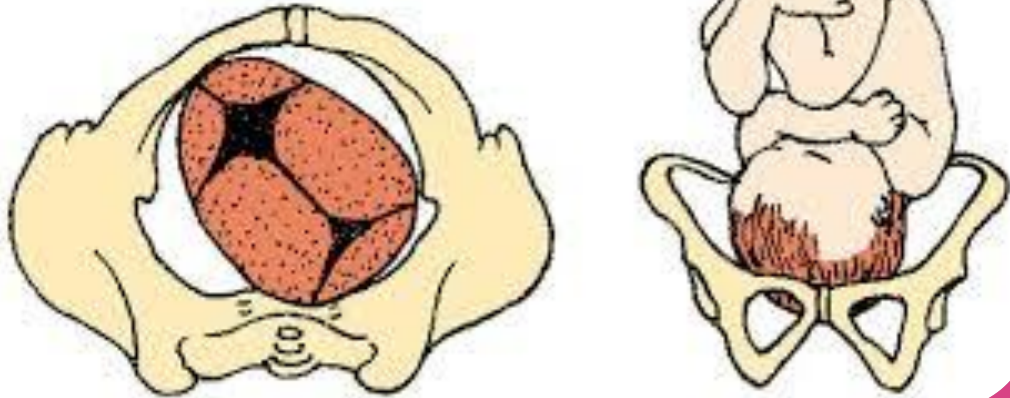
- **Malposition:** Is one where the fetal head is presenting but not as a well flexed vertex with the occiput in the anterior quadrant.

## LO 2

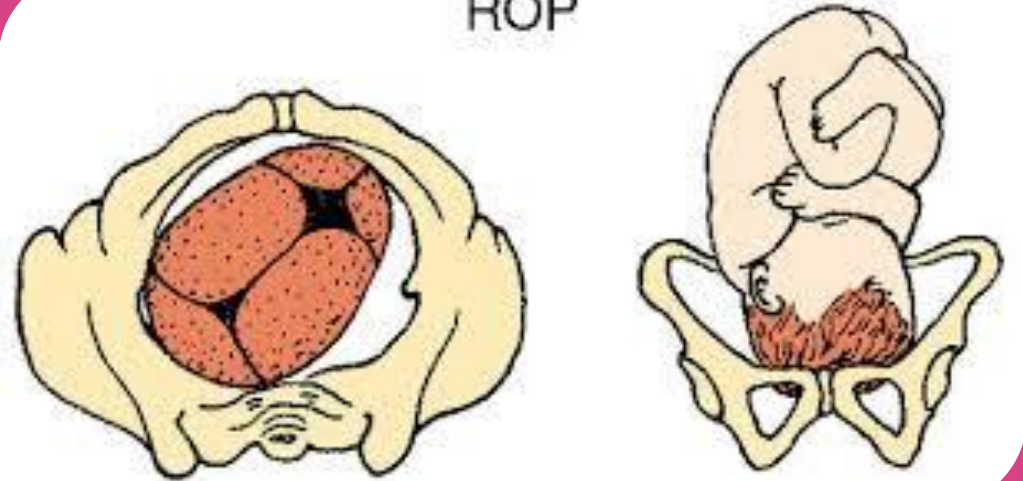
### Occipito-posterior position

- 20 % of cephalic presentation during early labour.
- The sagittal suture is in one of the oblique diameter usually the right.

LOP



ROP



# Aetiology

- The head can enter the brim in the direct OP position when the fetus is small & the pelvis is capacious or when a large fetus engages in a pelvis which has a brim which is longer anteroposteriorly than transversely.
- Anterior sited placenta.
- Deflexed head → brigma meet the pelvic floor resistance & rotate anteriorly.

# Diagnosis

**A- During pregnancy:** Is of no importance except it might be a cause of non-engagement.

**B- During labour:**

- 1- suspicion made if the patient develops early rupture of membranes with poorly engaged head.
- 2- Abdominal examination: slight flattening of the lower abdomen, the limbs are easily felt & the back is difficult to be felt with difficulty to hear the fetal heart.
- 3- Vaginal exam.: high presenting part early in labour, easy to feel the ant. Fontanel behind the pubis. Late in labour there may be moulding with caput succedaneum over the presenting part.
- 4- Ultrasound in labour may be helpful.

# The course of labour

- **70 % :spontaneous rotation to OA.**
- **10 % : short rotation to direct OP position & delivery as face to pubis.**
- **20 % persist as R or L OP where assisted rotation will be required.**
- **Prolong 1<sup>st</sup> & 2<sup>nd</sup> stages is a feature.**

## LO 3

### Management of the 1<sup>st</sup> stage

- **Managed as in a normal case; nothing can be done to correct the abnormality.**
- **Partogram.**
- **Epidural anesthesia.**
- **Augmentation should be done if there is no satisfactory cervical dilatation & if this doesn't result in better progress in few hours CS is performed which is also indicated for fetal distress.**

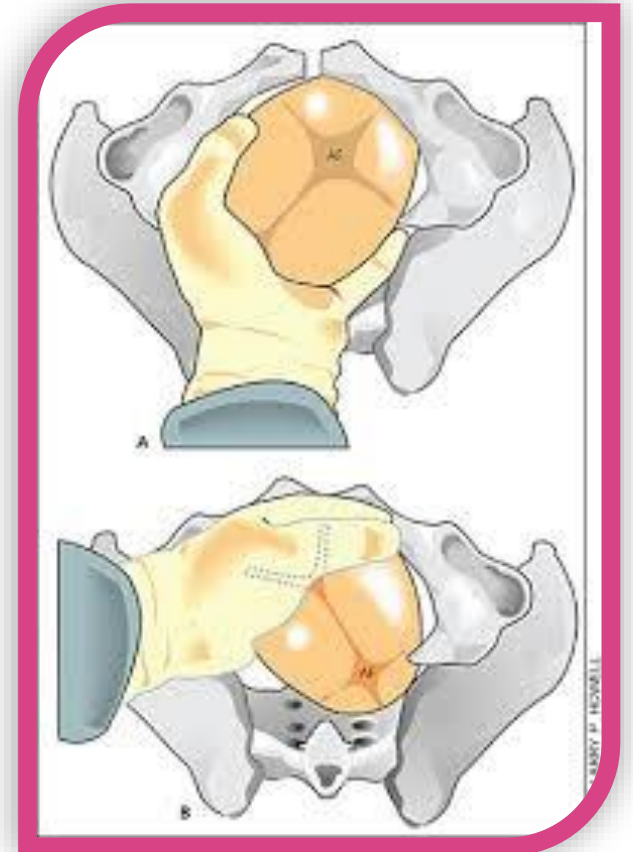
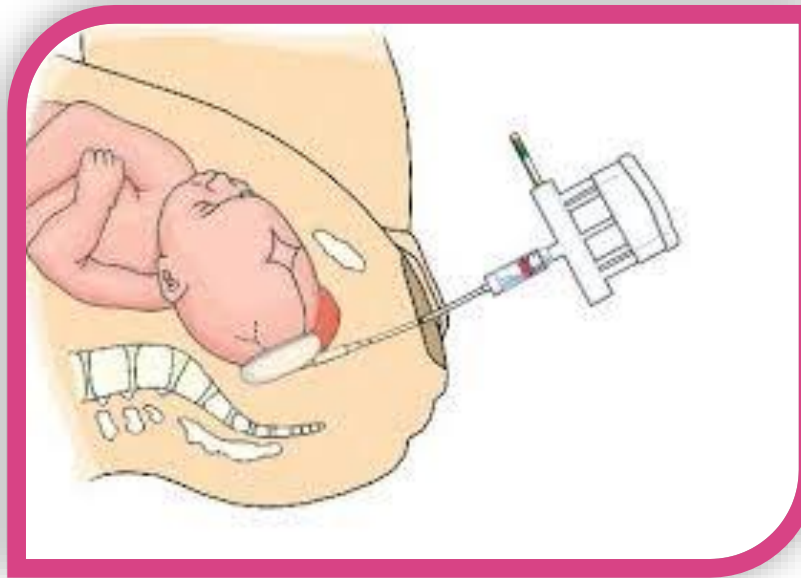
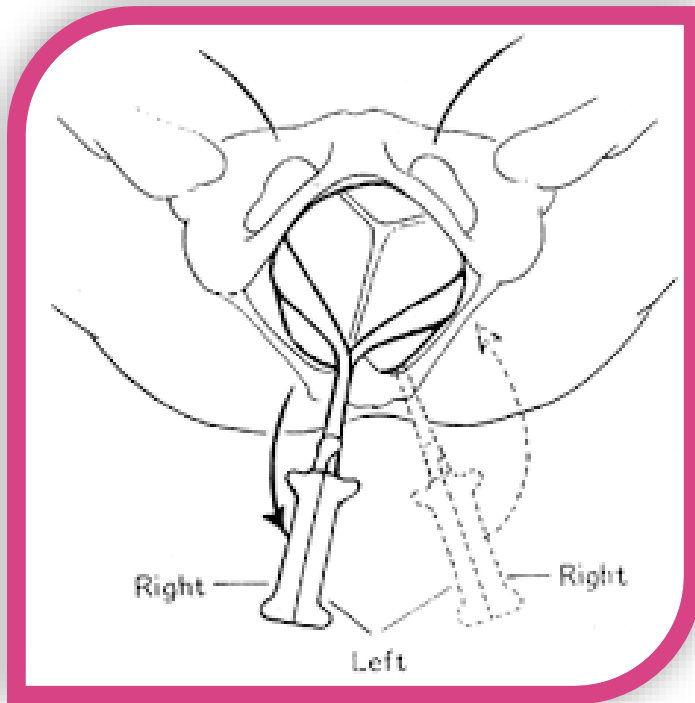


# Management of the 2<sup>nd</sup> stage

- Diagnosed by VE.
- The degree of flexion & position of the head are determined by palpation of the fontanelles,
- Continue deflexion, large caput & marked moulding suggest that spontaneous rotation may not occur.
- With good uterine contractions & good maternal expulsive forces, spontaneous rotation & normal delivery takes place. In 10 % delivery in face to pubis & this carries a greater risk of perineal tear.
- Interference is indicated in cases of:
  - 1- Failure of descent.
  - 2- Fetal distress.
  - 3- Maternal distress.

# Assisted delivery

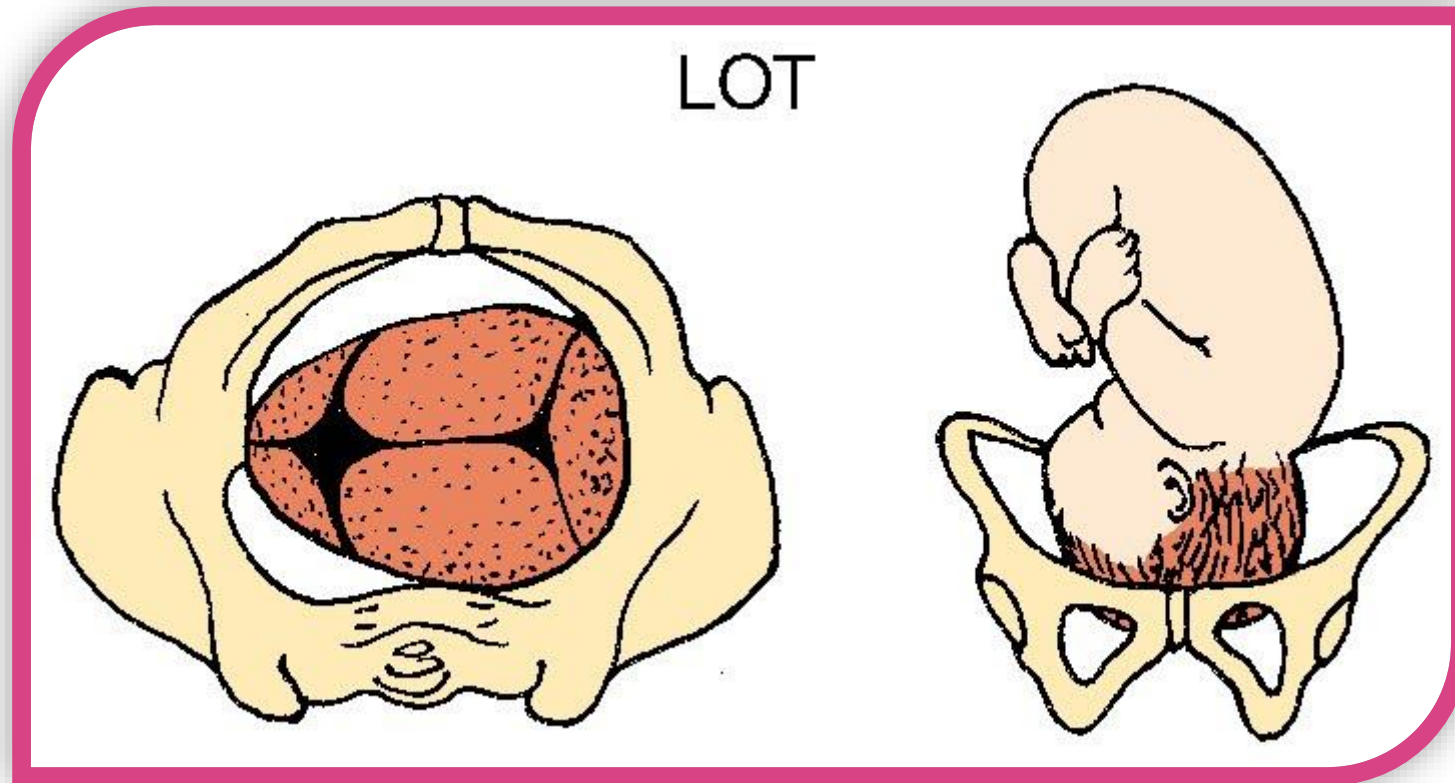
- 1- Manual rotation & forceps delivery. Requires GA or epidural.
- 2-Kjellands' forceps.( Rotation & traction)
- 3- Vacuum extractor.



## LO 4

### Deep Transverse arrest of the fetal head

- Is arrest in labour when the fetal head has descended to the level of the ischeal spines & the sagittal suture lies in the transverse diameter of the pelvis.



# Diagnosis

- **The condition is only diagnosed during the second stage of labour.**
- **The occiput may have been obliquely posterior at the onset of labour & only partly rotated foreword, or**
- **It may have descended from an initial transverse position.**
- **In android pelvis the head fails to descend to the pelvic floor, where rotation normally occur.**
- **By vaginal exam during the second stage when progress of labour ceased, the head arrested at the level of the ischeal spines, with sagittal suture at the transverse diameter of the pelvis.**

# Management

**1-Augment inefficient uterine contractions with oxytocin.**

**2-Rotation & traction as with OP.**

# LO 5

## Face presentation

Occur 1:300-500 deliveries.

### Causes:

**A- primary:** (before the onset of labor)

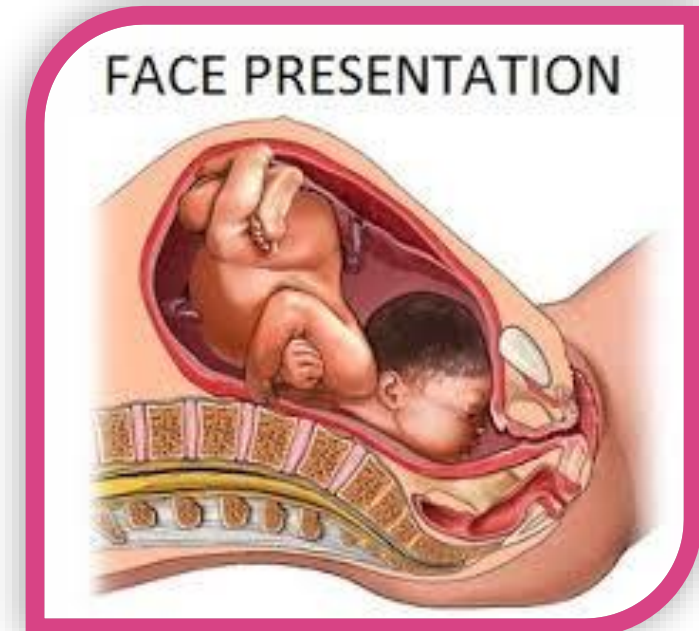
1. The most common is normal fetus actively holds its head extended ( in 50% of cases).
2. Anencephaly.
3. Prematurity.
4. Contracted pelvis.
5. Multiple pregnancies.
6. Cord around neck or neck tumors.
7. Polyhydramnios.
8. Multiparity.

**B-Secondary:** (the commonest) arise during labour eg. Extension of brow to face.

## LO 6

### Diagnosis :

- **Abdominal examination**
- **Mentoposterior:** the cephalic prominence is easily felt overlapping the symphysis pubis on the same side .
- **Mentoanterior :** the cephalic prominence is difficult to be felt because it is directed posteriorly. Fetal heart is easily heard over the chest than in mentoposterior position..
- **Ultrasound** in labor may be helpful.



- **Vaginal examination:**
- The membranes ruptured early in labor.
- Supraorbital ridges, the bridge of the nose & the alveolar margins within the mouth are recognized. If the face is edematous it can be mistaken for the breech.

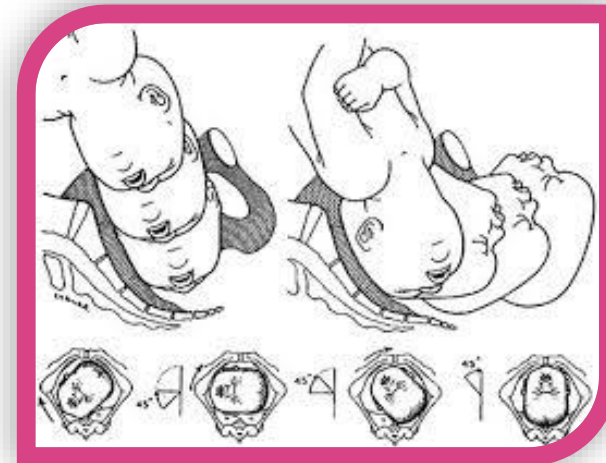




# Management

- **Fetal abnormality & contracted pelvis must be excluded.**
- **CS is indicated in:**
  1. **Old age primigravida.**
  2. **Bad obstetric history.**
  3. **Infertility.**
  4. **Scared uterus.**
  5. **PE**
  6. **placenta previa.**
  7. **Fetal weight > 3.5 kg.**
- **Epidural anesthesia or perineal infiltration is important for episiotomy or instrumental delivery.**

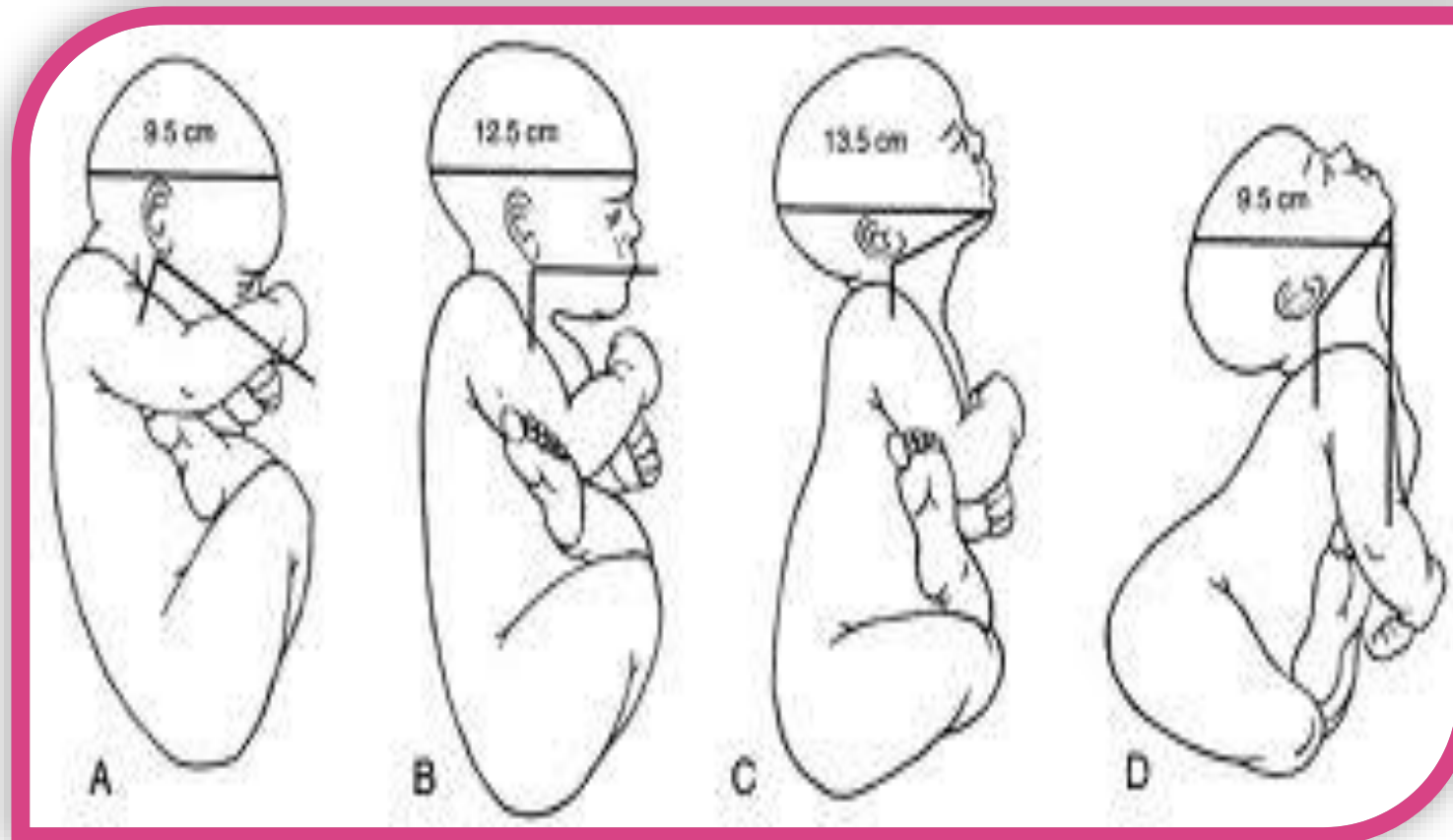
- ***In mentoanterior*** → observe for spontaneous delivery if there is delay in the 2<sup>nd</sup> stage forceps delivery may be attempted. Vacuum extractor is totally contraindicated.
- ***In mentoposterior*** → allow a time for spontaneous rotation which usually occur late in the 2<sup>nd</sup> stage, if rotation does not occur it can be helped by manual rotation to mentoanterior position under epidural anesthesia or GA & delivery is completed with forceps. Failure of this is an indication for CS.



## LO 7

### Brow presentation

- **Occur 1:1000 deliveries. Many brow presentations early in labour are transient proceeding to full deflexion or alternatively undergoing spontaneous flexion & correction to vertex.**



## Mechanism of labour:

- If a head of normal size lies with its longest diameter of 13 cm across the brim of normal pelvis it cannot engage & obstructed labour result. However, when the fetal head is quit small in proportion to the pelvis it may be engaged & born in brow presentation.
- Occasionally following engagement, spontaneous correction to vertex or face occur in the pelvis.



## LO 8

### Diagnosis:

- **Abdominal examination:** the head is above the brim, with some overlap & the cephalic prominence is on the same side as the back. The head feels larger from side to side.
- **Vaginal examination:** the membranes rupture early in labour with risk of cord prolapse, the presenting part is high & the forehead , with the orbital ridges & bridge of the nose in front & the anterior fontanel can be felt with the examining finger.
- **Abdominal ultrasound.**

## Management:

- **If diagnosed during the antenatal period** congenital malformations & CPD should be excluded otherwise nothing should be done, as in most cases the head will flex when labour starts & spontaneous delivery will occur.
- **If diagnosed early in labour** & there is no evidence of severe CPD short trial of labour is permitted & this may result in further extension of the head to face presentation & engagement. If the head fails to engage or persistent brow presentation or if there is evidence of disproportion a CS is performed, which is done if fetal distress develops in labour.

THANK YOU