

1. DIAGNOSIS OF PELVIC OUTLET.

1. History

- Medical history of rickets, tuberculosis, fractures, poliomyelitis
- Previous vaginal delivery of average sized baby in good condition & excludes a contracted pelvis.

• Previous difficult vaginal delivery

- difficult instrumental delivery
- birth asphyxia
- still birth

then possibility of contraction of CPD $\rightarrow$ cephalopelvic disproportion

2. General Examination

A contracted pelvis should be suspected in the presence of short stature, abnormal waddling gait, pendulous abdomen and deformities of the limbs or spine. Women with small pelvis are in general short.

3. Abdominal Examination.

A mobile head in a nullipara at term should raise the suspicion of CPD, although the most common cause is in occipito posterior position.

4. Pelvic assessment or clinical pelvimetry.

pelvis assessed by vaginal examination

[Internal pelvimetry
External pelvimetry]

techniques:

- pelvic brims measured (dist. b/w iliopectineal lines $\rightarrow$ estimate pelvic inlet).
- Sacral prominence measured (dist. b/w side of mid pelvis).
- Ischial spine measured (dist. b/w ischial spines $\rightarrow$ estimate pelvic outlet).
- Finger breadth measurement.]

5. Assessment of CPD.

- * Munro-Kerr - Muller method.
- * Head fitting test by Muller & Hille.

In clinical practice, the fetal head is the best pelvimeter. relative size of fetal head to pelvis more imp. than absolute size of pelvis.

- only helpful in active labor.
- only disproportion at brim can be detected.
- Not useful to detect midpelvic or outlet contraction.

Munro Kerr - Muller method

- bimanual method.
- patient is in modified dorsal position, legs flexed, bladder and bowels empty.
- left hand over abdomen pushes head to pelvis.
- Other hand had inserted vaginally estimate whether vertex reaches level of sacral spine.
- best done at onset of labour.
- only assess disproportion of Pelvis.
- If head can be pushed down at onset to level of spine, there is no disproportion.
- If head can be pushed down a little but not up to spine and the thumb of right hand is flush with symphysis pubis, there may be major degree of CPD.
- If head cannot be pushed down at all and posterior bone accedes the symphysis pubis as detected by thumb of right hand - minor degree of CPD.

Muller - Miller head fitting test

- semi recumbent position.
- 45° tilt.
- legs semiflexed at thigh & knee.
- Obstetrician grasps fetal head with fingers of left hand and pushes it downwards and backwards onto the pelvis.
- Smooth — no CPD
- If head flush or accedes pubic bone — CPD present.

points to be noted.

Outlet — subpubic angle
subpubic arch.
Transverse diameter.

6) Radiopelvic and MRI

→ gives a precise assessment of pelvic measurements.
not done in practice because pelvic capacity is only one of the factors that determine a successful outcome of labour.
If employed a single erect lateral film is taken.

MRI — no radiation exposure but not popular.

7) Pointers towards CPD in labour

- prolonged labour despite augmentation with oxytocin.
- Head remaining high at full dilatation.
- Cervix loosely applied to the head.
- Excessive caput or irreducible moulding of the fetal head.