

UNIT -4

MECHANISM OF LABOUR



Definition-Labour

- Labour may be defined as **rhythmic contraction and relaxation of the uterine muscles** with progressive effacement and dilatation of the cervix, leading to expulsion of the products of conception.

Definition: Mechanism of Labour

LABOUR-1. A series of passive, adaptive movements of the fetal head and shoulders smallest diameter to pass through the **birth canal**.

2. The mechanism of labour are the positional **movements that the fetus** undergoes to accommodate itself to the maternal pelvis.

Terminology :

1.Lie: the relation of the long axis of the fetus to that of the mother

Eg.

- .longitudinal lie
- .transverse lie

2.Attitude: posture of the fetus

- Head flexed over the chest
- Arms/hands flexed over the chest
- Thighs/legs flexed over the abdomen

3.Presentation: the presenting part is the portion of the body of the fetus

EG: vertex presentation, brow presentation, face presentation.

4. Position : the relation of an arbitrary chosen point of the fetal presenting part to the right or left side of the maternal birth canal.

EG. LOA-LEFT OCCIPITO ANTERIOR

ROA- RIGHT OCCIPITO ANTERIOR

Cardinal movements of labour

1. Engagement
2. Descent
3. Flexion
4. Internal rotation of the head
5. Crowning
6. Extension
7. Restitution
8. External rotation of the head / internal rotation of shoulder
9. Lateral flexion of the body and shoulder through birth canal.

ENGAGEMENT

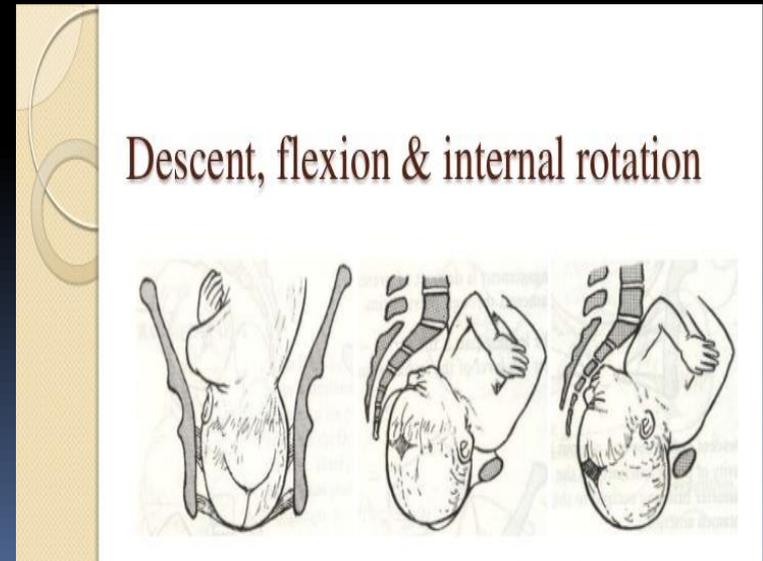
Engagement takes place when the bipareital diameter of the fetal head has passed through the pelvic inlet.

In primigravida , it usually occurs 12hours. In multi it will occur within 6hrs.



DESCENT

It is a continuous movement throughout the process of delivery. Descent result in number of forces including contractions, and maternal pushing effort with contraction of her abdominal muscles.



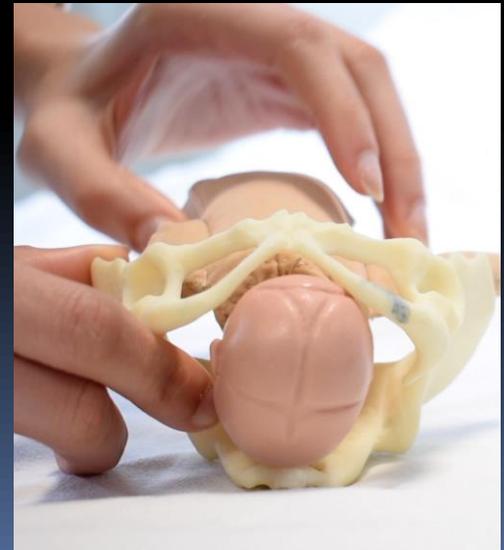
FLEXION

- As the head descends , it meets resistance from the pelvic walls and floor and this leads to **increased flexion of the head.**
- As the head flexed it brings the shortest longitudinal diameter of the head (**sub – occipito – bregmatic 9.5cm)** to pass through the birth canal.



Internal rotation of the head

- The occiput leads and meets the pelvic floor first and rotates anteriorly $\frac{1}{8}$ of a circle.



CROWNING

- After internal rotation of head, further descent occurs until the occiput lies underneath the pelvic arch. At this stage, the maximum diameter of the head (biparietal diameter) stretches the vulval outlet.



EXTENSION

- Once crowning has occurred, the fetal head is pivot under the symphysis pubis and the sinciput, face and chin sweep over the perinium.



RESTITUTION

- with restitution , the occiput moves $\frac{1}{8}$ of a circle towards the side from which it started.



Internal rotation of shoulder

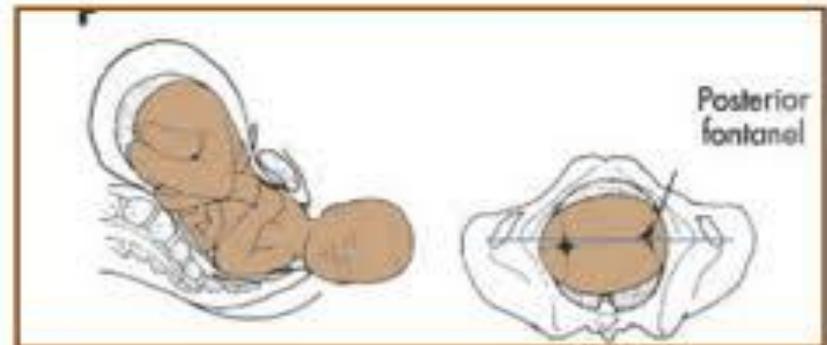
- The anterior shoulder reaches the pelvic floor and rotates **anteriorly $\frac{1}{8}$ th of a circle.** The shoulder come to lie in the antero posterior diameter of the pelvic outlet.



EXTERNAL ROTATION OF HEAD

The head rotates $\frac{1}{8}$ th of a circle towards the symphysis pubis from the oblique diameter.

EXTERNAL ROTATION



LATERAL FLEXION OF BODY AND HEAD

After the shoulder are delivered, the body is born by lateral flexion following the curve of Carver's.





Thank

you