
3rd stage of labour:

Signs of placental separation

- ❖ **A fresh show of blood from vagina,**
 - ❖ **The umbilical cord lengthens outside the vagina,**
 - ❖ **The fundus of the uterus rises up,**
 - ❖ **The uterus becomes firm and globular.**
-

Important terms in obstetrics

Engagement?

Position?

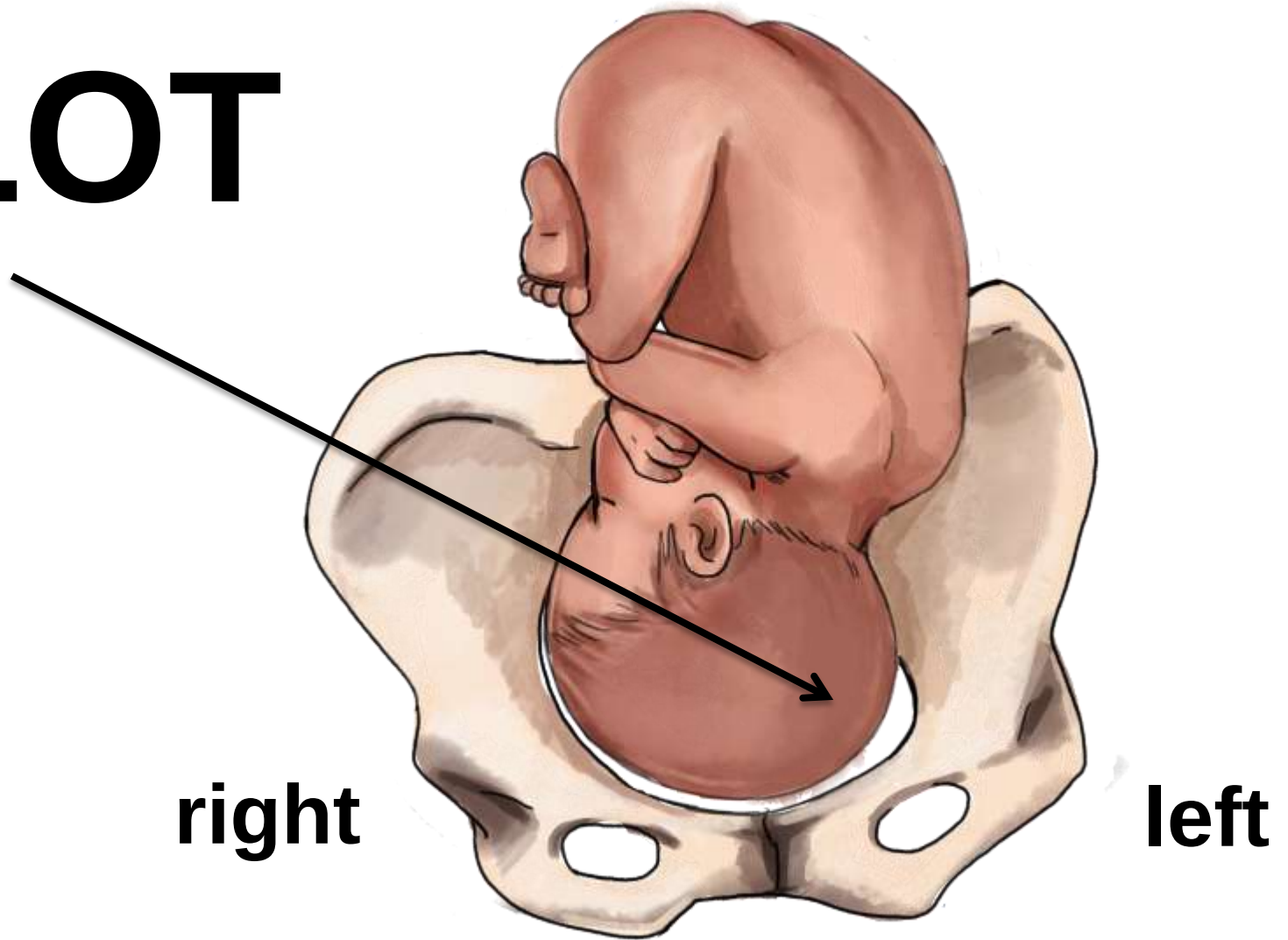
Attitude?

Station?

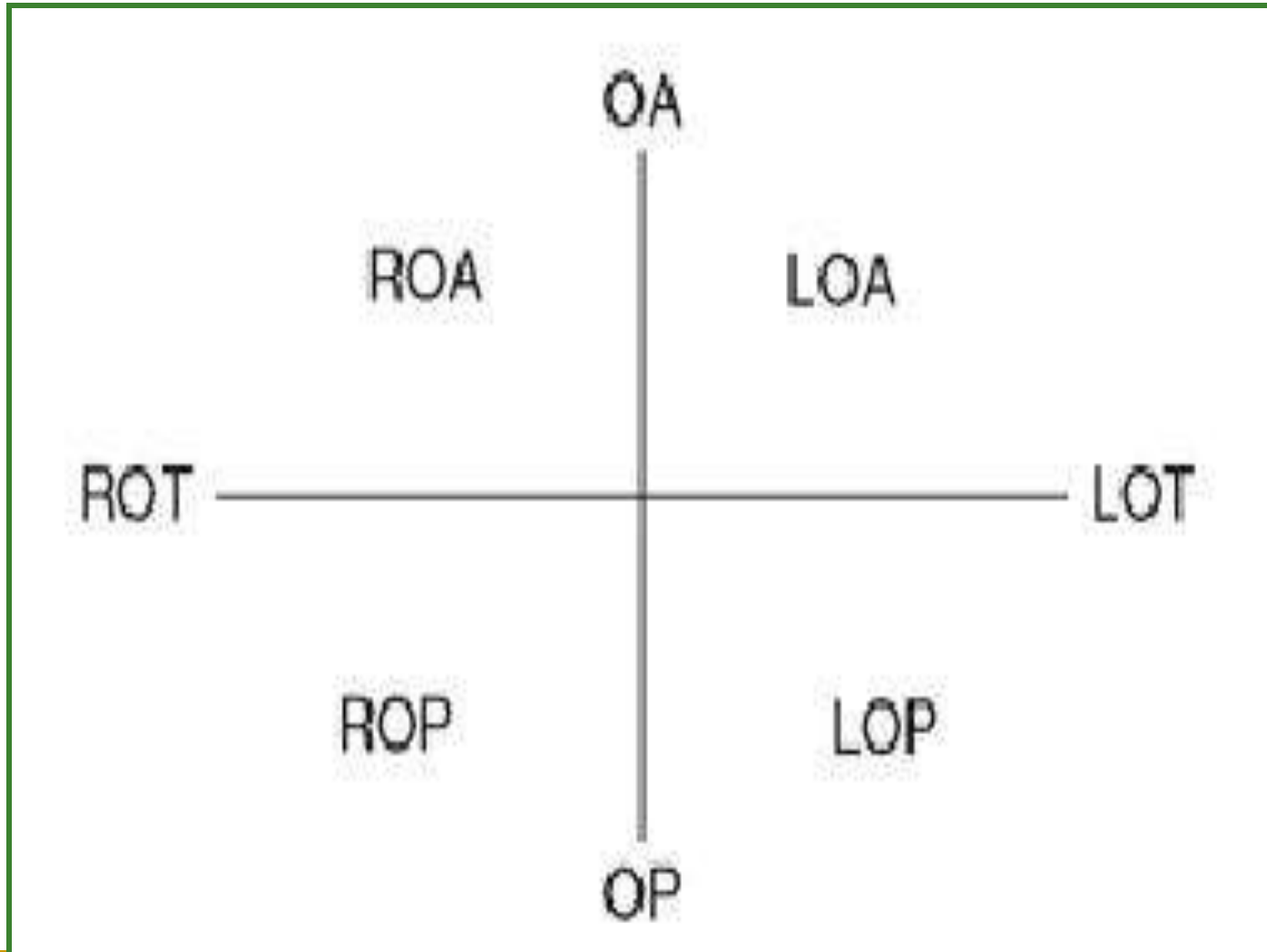
Moulding?

Left Occipito-Transverse position

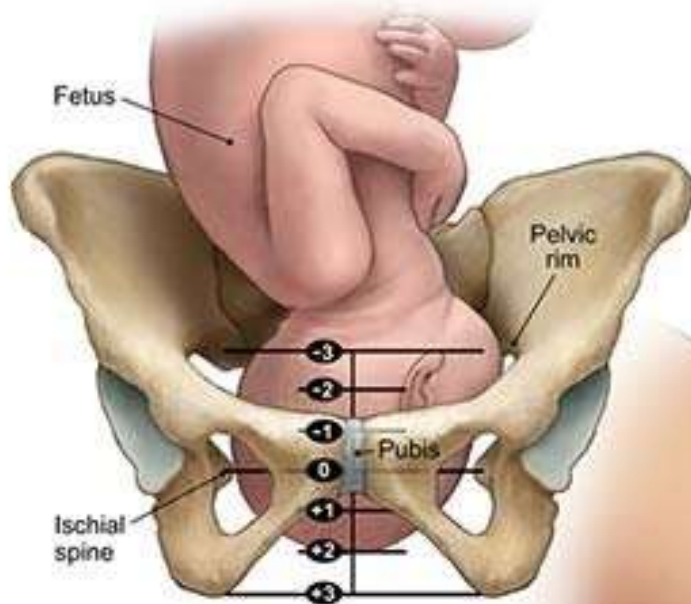
LOT



the position of the presenting part



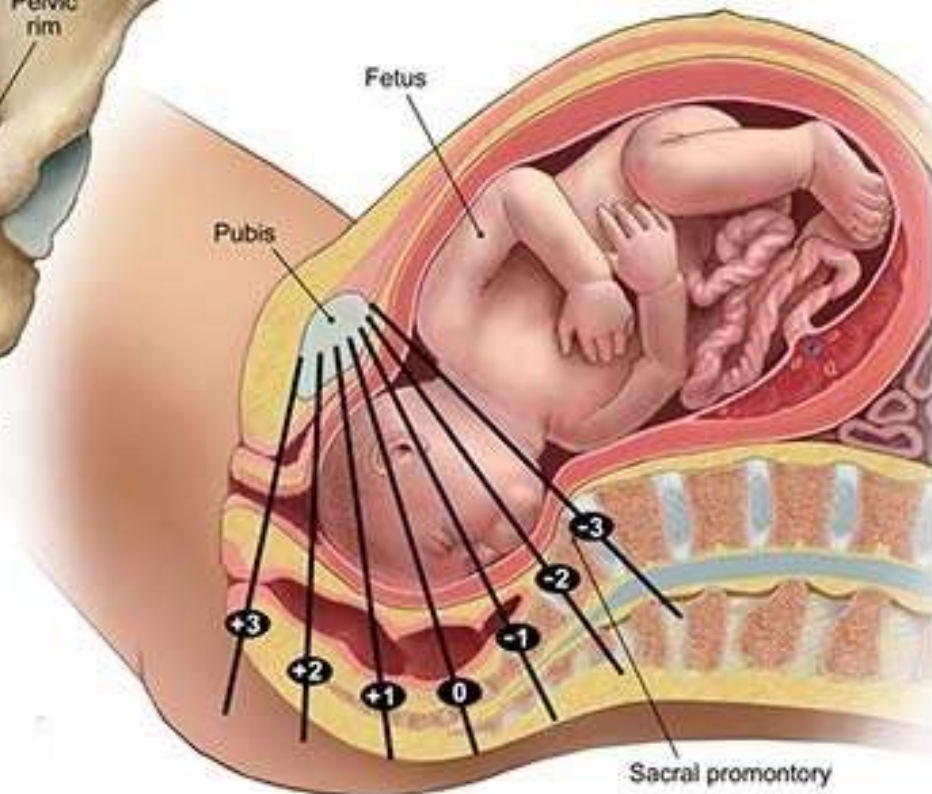
Engagement (and stations of fetal head during delivery)



Anterior View of Pelvis

Station	Landmarks
-3	Pelvic inlet
-2	
-1	
0	Ischial Spine
+1	
+2	pelvic outlet
+3	

Sagittal View Through Abdomen



Normal Labour / 3rd Lecture

Mechanism of Labour

Dr. Suhaila Al-Shaikh

Reference Textbook
Obstetrics by ten teachers
20th ed(2017): ch 12; p 386-89

Learning objectives

To understand the cardinal movements of the fetal head when it passes through the maternal pelvis and the effect of maternal pelvis asymmetry and fetal skull asymmetry in directing these movements

Mechanisms of labor, or the cardinal movements of labor, refer to the changes in position and attitude that the fetal head undergoes during its passage through the birth canal.

In normal labour

(i.e: for the vertex presentation and the gynaecoid pelvis).

The relation of the fetal head and fetal body to the maternal pelvis changes as the fetus descends through the pelvis.

To get the optimal diameters of the fetal skull while it descends through the birth passage

The movements arranged in order:

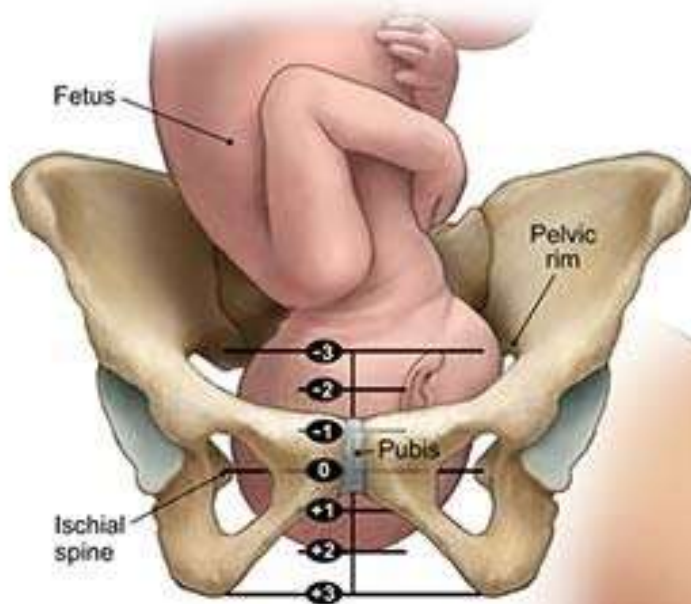
- Engagement
 - Descent
 - Flexion
 - Internal rotation
 - Extension
 - External rotation and restitution
 - Delivery of anterior and posterior shoulders
 - Expulsion of the rest of the body
-

1- Engagement

Engagement is descent of the biparietal diameter of the fetal head below the plane of the pelvic inlet.

The head enters the pelvis in the occiput transverse position in women with a gynecoid pelvis.

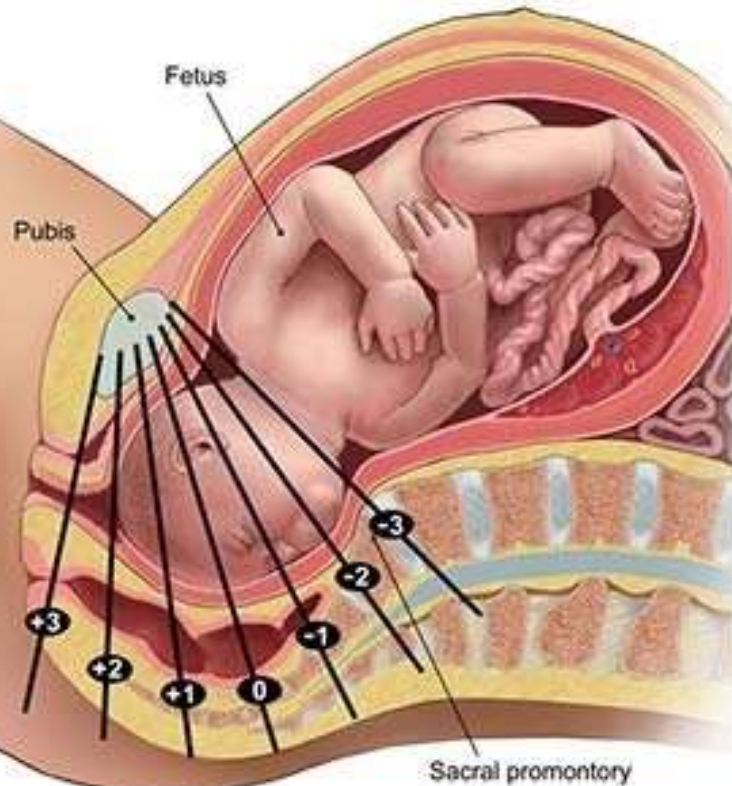
Engagement (and stations of fetal head during delivery)



Anterior View of Pelvis

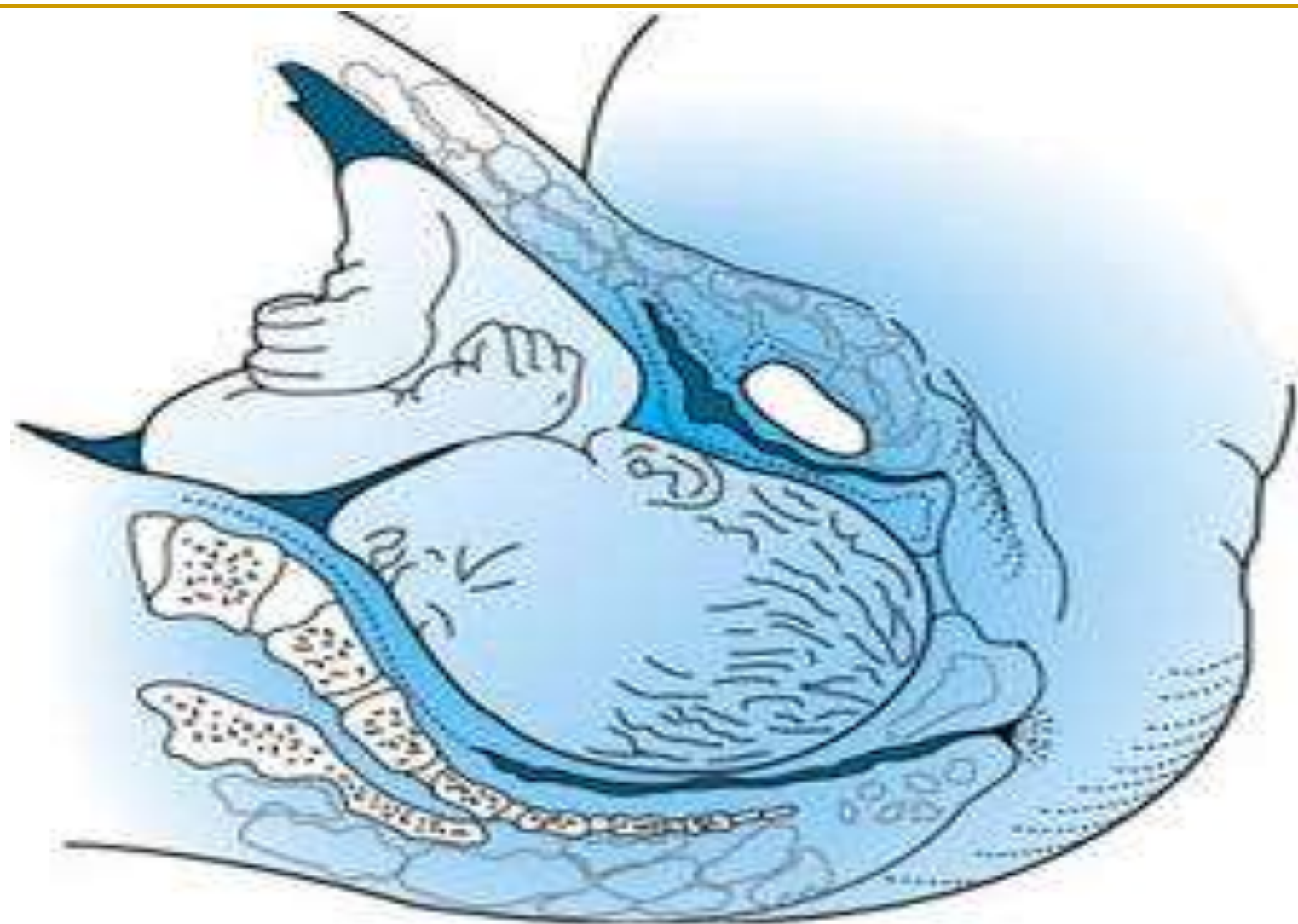
Station	Landmarks
-3	Pelvic inlet
-2	
-1	
0	Ischial Spine
+1	
+2	pelvic outlet
+3	

Sagittal View Through Abdomen



2- DESCENT:

- ❑ When the uterus contract it pushes the baby down through the birth canal (**the fetal head descend through the pelvic brim to the midcavity**).
-



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Descent in left occipitoanterior position.

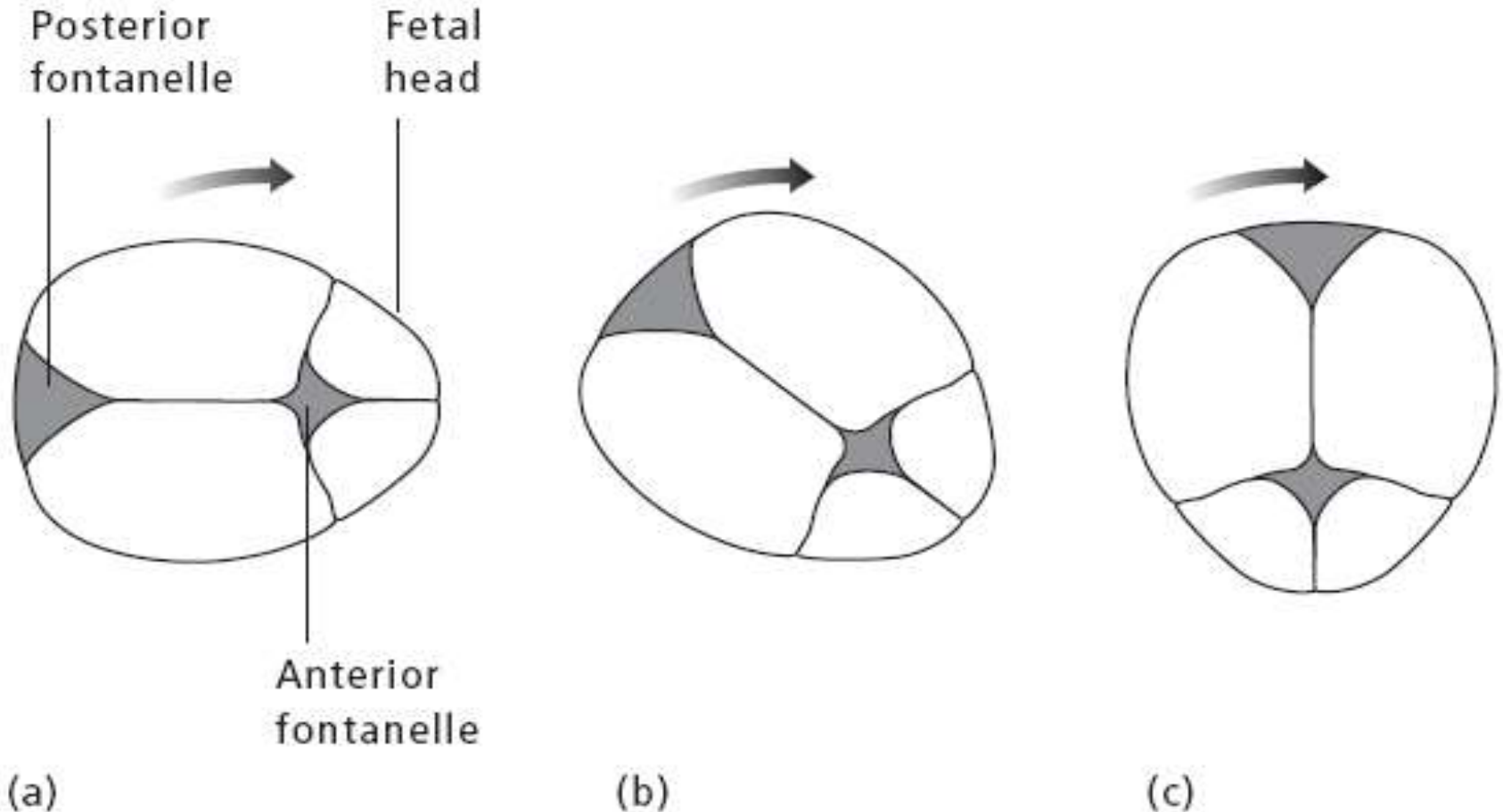
3- Flexion

Uterine activity is fundally dominant; the line of force is down the fetal spine and causes flexion of the fetal head. flexion is a passive movement that permits the smallest diameter of the fetal head (suboccipitobregmatic diameter) to be presented to the maternal pelvis.

With the progress at the end of the first stage and beginning of the 2nd stage there is *further descent & flexion* of the presenting part (head) in the pelvis

4- Internal rotation

The head rotates from the left occipito-transverse position at engagement to become direct occipito-anterior position.



Internal rotation of the head. (a) Inlet: right occipitotransverse position. (b) Mid-cavity: right occipitoanterior position. (c) Outlet: direct occipitoanterior position

Further descent through the pelvis causes the chin to be forced tightly up against the fetal chest.

5- Extension

**As the head continues its descent,
The fetal occiput comes to lie
behind the maternal symphysis
pubis, gradual extension of the
fetal head occurs distending the
perineum**

With more extension, the widest diameter passes through the vulval introitus (crowning) and the head is born by extension at the fetal neck.

Extension



6- Restitution and external rotation

As the head is being born, the shoulders enter the maximum diameter (the transverse diameter) of the maternal pelvic inlet. As they descend through the canal, the shoulders rotate (just as the head did in internal rotation) and, as they do so, the head (outside the body now) rotates 90°. The shoulders now lie in the anteroposterior diameter behind the maternal symphysis pubis.



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External rotation of the head.

7- Delivery of the body

Delivery of the anterior shoulder is aided by gentle downward traction on head. The posterior shoulder is then delivered by gentle upward traction on the head. Following these maneuvers, the body, legs, and feet are delivered with gentle traction on the shoulders.



features of normal labour?

- 1. Spontaneous onset at 37–42 weeks' gestation.**
- 2. Singleton pregnancy.**
- 3. Cephalic vertex presentation.**
- 4. No artificial interventions.**
- 5. Cervical dilatation of at least 1 cm every 2 hours in the active phase of first stage.**
- 6. Active second stage no more than 2 hours in primiparous and 60 minutes in multiparous woman.**
- 7. Spontaneous vaginal delivery.**
- 8. Third stage lasting no more than 30 minutes with active management.**