

Labor



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Labor is regular, painful contractions that result in progressive cervical dilation and effacement



THEORIES OF THE CAUSES OF LABOR

- Oxytocin stimulation, like a result pressure on the cervix
- Fetal cortisol levels, which reduce progesterone formation
- Progesterone withdrawal
- Prostaglandin release, like a result of stretching of uterine muscular

Signs of Labor



Signs of Labor

- Lightening (fetus going down to the pelvis)
- Increase in level of activity (Epinephrin going high coz progesterone down)
- Braxton Hicks contraction (infrequent, irregular and involve only mild cramping)
- Ripening of the cervix

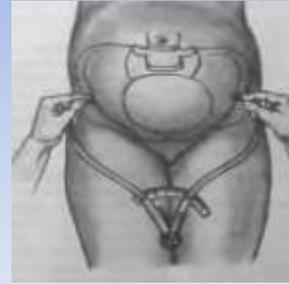
Signs of true Labor

- Uterine contraction (frequently and coming without warning)
- Show (cervix softens and ripens)
- Rapture of the membranes

Components of Labor

- The woman pelvis (the passage)
- The passenger (the fetus)
- The powers of labor (uterine factors)
- A woman psyche

Pelviometry

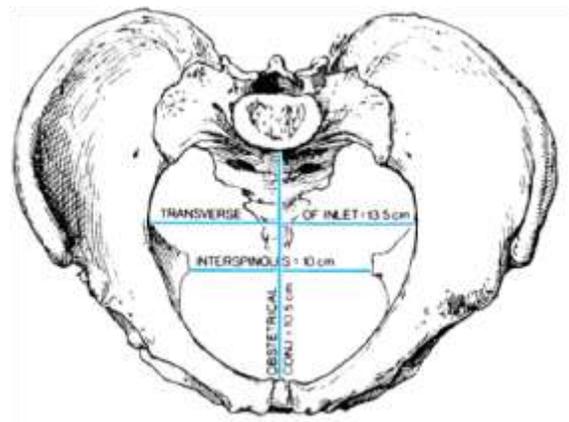
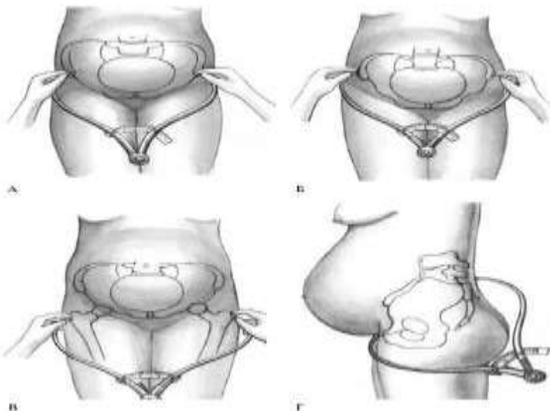


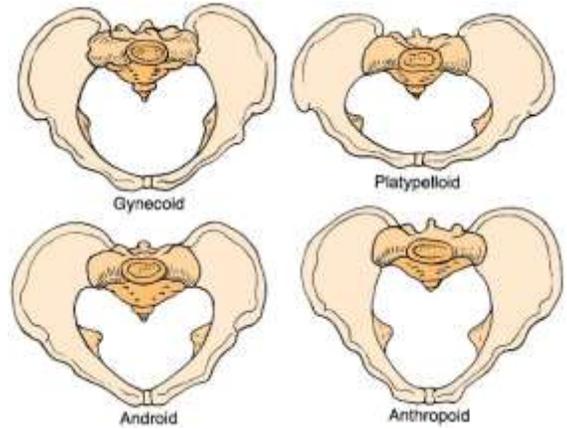
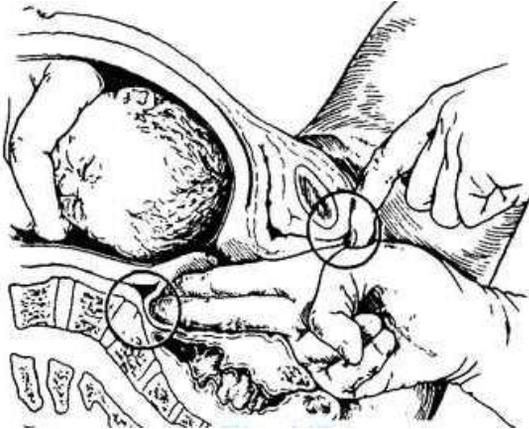
Pelviometry

- Distansia spinarum – 25 -27 cm
- Distansia cristarum – 27 – 29 cm
- Distansia trochanterium – 30 – 32 cm
- External Conjugata – 20 – 21 cm

Pelvic inlet

- Conjugata anatomica – conjugata vera +1 cm
- Conjugata vera (gynecologica) 11 cm (conjugata diagonalis -1.5 – 2 cm)
- Conjugata diagonalis 12 - 13 cm





Passenger (the fetus)

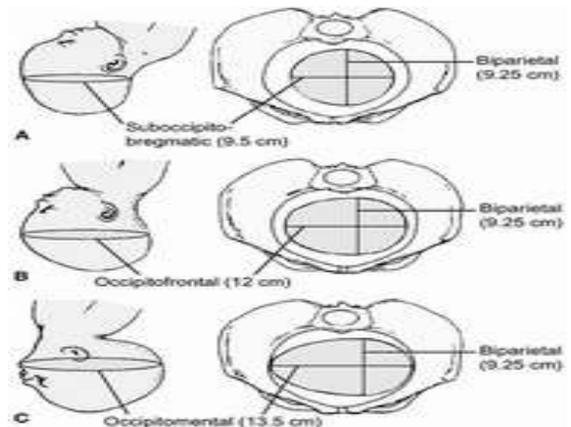


Anterior Fontanelle



Anterior Fontanelle

The anterior fontanelle (bregmatic fontanelle, frontal fontanelle) is the largest fontanelle (about 4 cm in its antero-posterior and 2.5 cm in its transverse diameter) covered with significant membrane. The fontanelle allows the skull to deform during birth to ease its passage through the birth canal and for expansion of the brain after birth. While the posterior and lateral fontanelles are obliterated by about six months after birth, the anterior is not completely closed until about the middle of the second year



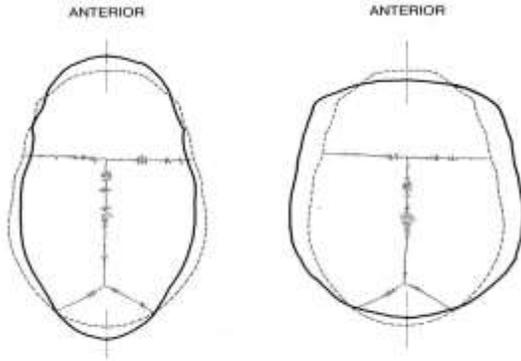
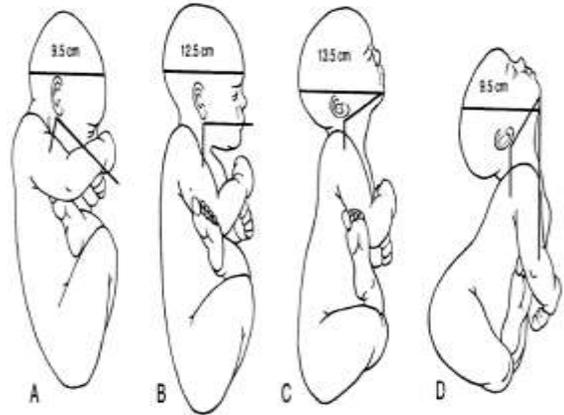
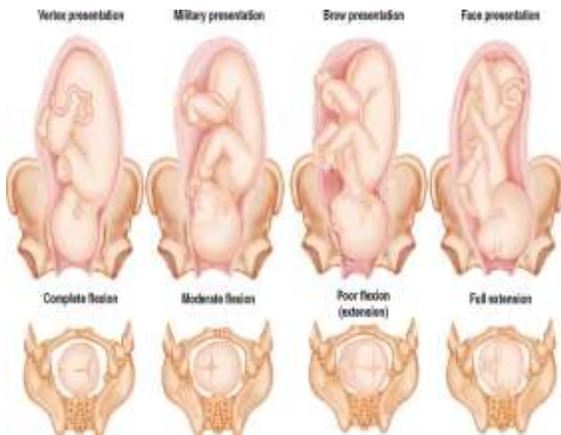


Illustration 3-6-A
The Skull in Extreme Extension

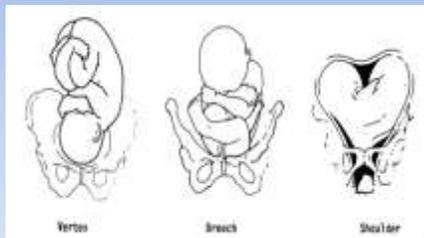
Illustration 3-6-B
The Skull in Extreme Flexion

Fetal Lie

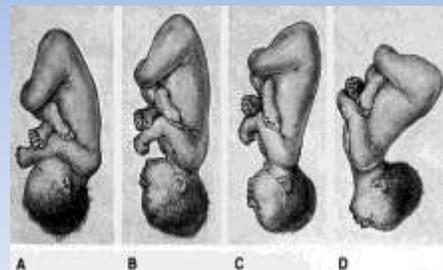
Fetal lie refers to the relationship between the long axis of the fetus with respect to the long axis of the mother. The possibilities include a longitudinal lie, a transverse lie, and, on occasion, an oblique lie



Types of Fetal Presentation



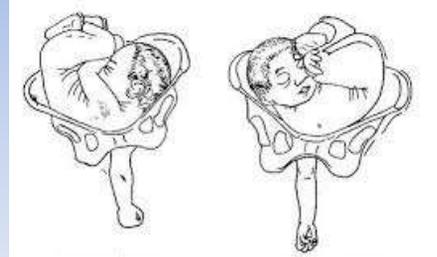
Cephalic Presentation



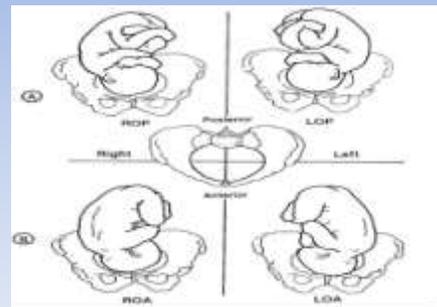
Breech Presentation

Frank Breech (95%)	Complete Breech (5%)	Incomplete Breech (2%)	
		Footling Breech	Kneeling Breech
			
The fetus's legs point up and knees are extended.	The fetus's feet and knees point up.	The fetus's feet and knees point up and extended on one or both sides.	The fetus's legs point up and extended and knees are flexed on one or both sides.

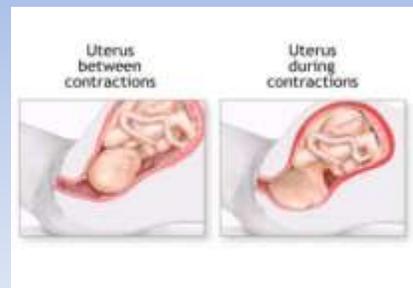
Shoulder Presentation



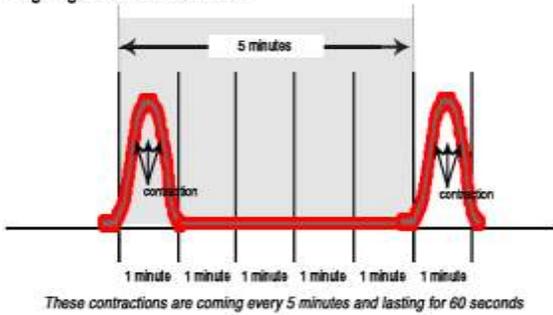
Types of Fetal Position



Power of Labor



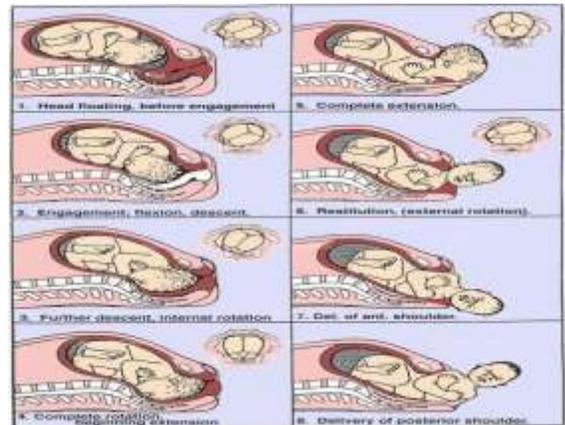
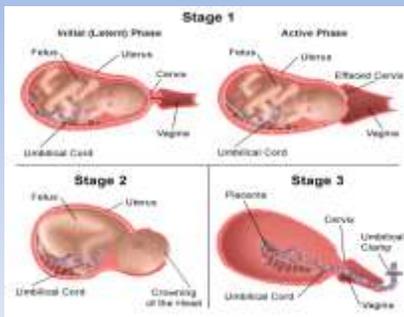
DURATION: beginning to end of one contraction
FREQUENCY: beginning of one contraction to the beginning of the next contraction.



Stages of Labor



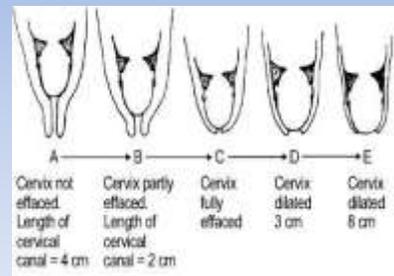
Stages of labor



First stage (cervical stage)



First stage (cervical stage)



First stage (cervical stage)

The first stage of labor entails cervical change. It begins when uterine contractions become sufficiently strong or adequate to initiate effacement and dilation of the cervix

- *Effacement of the cervix is the shortening of the cervical canal into a paper-thin orifice. Effacement occurs as the muscle fibers near the internal os are pulled upward into the lower uterine segment*
- *Dilation of the cervix involves the gradual widening of the cervical os. For the head of the average fetus at term to be able to pass through the cervix, the cervix must dilate to a diameter of approximately 10 cm. When the fetal head is able to descend past the remaining cervix, the cervix is no longer palpable and is said to be completely or fully dilated*

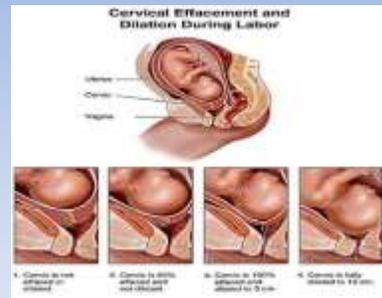
Cervical Stage

- The latent or preparatory phase – contractions mild and short (20 – 40 sec), Cervical effacement occurs, cervix dilatation from 0-3 cm. Phase lasts 6 hours (4.5 for multipara). Early anesthesia can prolong this phase
- The active phase – contractions more strong (40 – 60 sec every 3-5 min), dilatation of cervix 4 – 7 cm. Phase lasts 3 hours (2 hours for multipara)

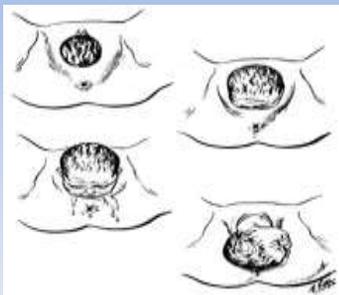
Cervical Stage

- Transition phase – high level of intensity of the contractions, contractions every 2 -3 min, duration 60 – 90 seconds, dilatation of cervix 8 -10 cm

First stage (cervical stage)



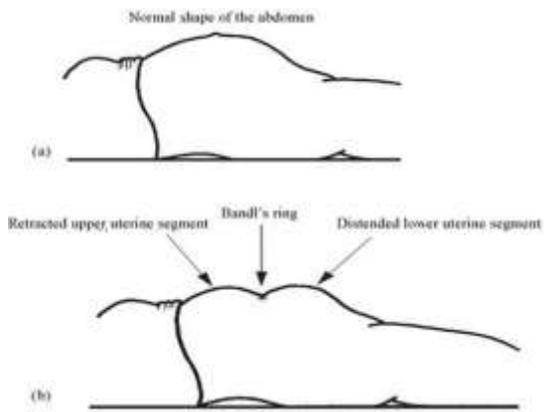
Second stage (pelvic stage)



Second stage (pelvic stage)

The second stage of labor involves the passage of the fetus through the maternal pelvis and expulsion of the fetus. It begins with the complete dilation of the cervix and ends when the infant is delivered. According to the Friedman curve:

- In a nulliparous patient, the second stage of labor should last less than 2 hours without regional anesthesia, and less than 3 hours if a woman has regional anesthesia.
- In a multiparous patient, the second stage of labor should last less than 1 hour without regional anesthesia, and less than 2 hours if a woman has regional anesthesia



Thank You For Your Attention

