

Intrapartum

Stages of Labor

- 1st** - less than 10 cm dilated
The stage of dilation
- **Latent**
 - mild contractions about every 15 mins, low back pain
 - **Active**
 - contraction frequency 4-7cm dilation
 - **Transitional**
 - pain becomes more intense 8-10cm contractions Q 2-3min

- 2nd** - greater than 10 cm dilated
Expulsion stage
- full effacement and then crowning
 - the mother may actively push the baby out

- 3rd** - delivery of the placenta (5-10 mins)
Placental stage
- begins with birth of the baby and ends when placenta expels
 - Schultze mechanism
 - shiny/fetal side 1st
 - Duncan mechanism
 - rough maternal side 1st

- 4th** - recovery and bonding after birth (1-4 hrs)
Stage of recovery
- the uterus contracts to prevent hemorrhage
 - afterpains and discomfort are common
 - ideal time for bonding and skin to skin

Intervention

- assist with comfort and position changes
- establish effective breathing patterns
- educate mother and partner of what to expect
- offer fluids
- encourage rest between contractions
- encourage voiding every 1-2 hours
- keep mother and partner informed of progress

- perform assessments Q 5 mins
- monitor FHR before, during and after contractions
- monitor maternal contractions
- monitor for signs of birth

- assess maternal vital signs
- provide warmth to mother
- examine placenta and verify it's intact
- assess uterine status

- perform maternal assessment frequently
- apply ice packs to the perineum
- provide lactation and breastfeeding support
- massage uterus if needed

Uterine Contractions

- the upper 2/3 of the uterus contracts actively and becomes thicker during labor
- the lower 1/3 contracts passively and becomes thinner / pulled upwards

False Labor

- inconsistent frequency of contractions
- physical activity doesn't affect contractions
- pain felt in abdomen and groin
- no change in dilation after 1-2 hours

True Labor

- consistent pattern with high frequency/duration
- physical activity increase strength of contractions
- pain begins in lower back and moves to lower abdomen
- effacement or dilation occurs and increases over time

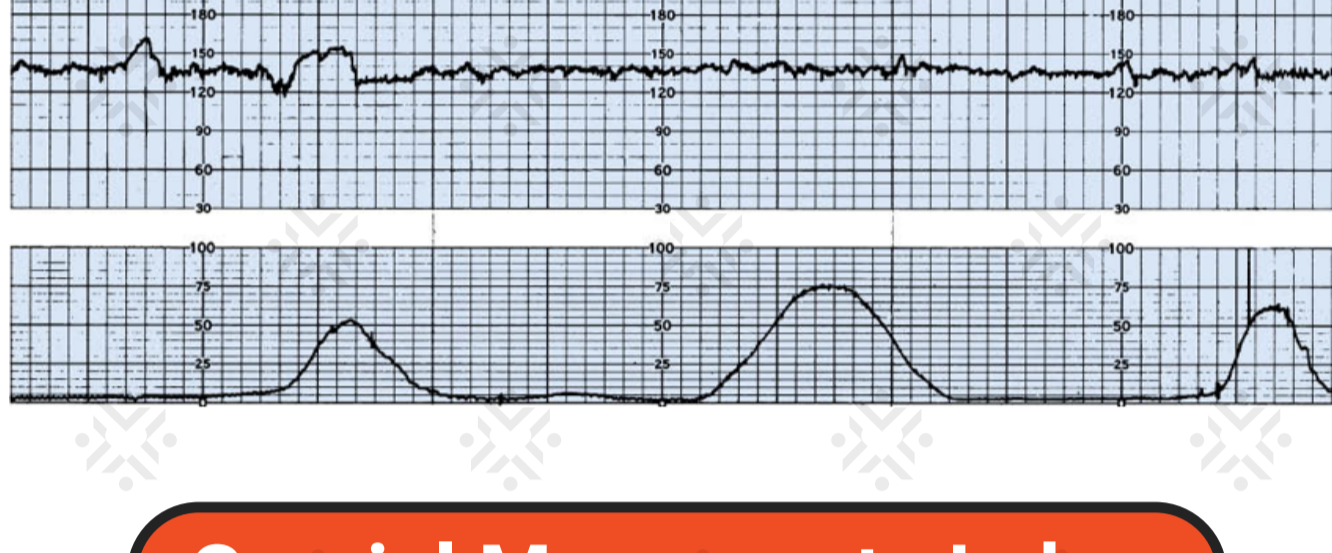
Fetal HR Monitoring

Normal = 110 - 160 beats per minute

- Variable deceleration
- Early deceleration
- Acceleration
- Late deceleration
- Cord compression
- Head compression
- Oxygenated
- Placental insufficiency

Accelerations are thought to be a sign of fetal well-being

Fetal Accelerations



Cranial Movements Labor

1. Descent
2. Engagement
3. Flex
4. Internal Rotation
5. Extension
6. External Rotation
7. Expulsion

Presenting Positions

Breech - feet/legs first frank, complete footing.

Cephalic - head first

Shoulder - arm/back first

Points to Remember

- Lightening becomes engagement which is when the baby's head at the level of the ischial spine.
- An amniotomy is an artificial rupture of membranes to stimulate labor.
 - high risk of infection and prolapsed cord
- An episiotomy is an incision made to make the passageway more favorable for birth.
- Hypertonic contractions are very painful and the priority nursing action is encouraging rest.
 - Hypertonicity - contractions ≤ 60 secs apart.
 - Risk of low fetal oxygen because of low blood flow.

The Bishop Score

	0	1	2	3
Cervix dilation (cm)	0	1-2	3-4	>5
Cervix effacement (%)	0-30	40-50	60-70	>80
Cervix consistency	Firm	Medium	Soft	
Cervix position	Posterior	Mid	Anterior	
Station	-3	-2	-1	+1, +2

Pharmacology

Pitocin/Oxytocin - Oxytocic

Makes the uterine muscle more permeable to Na^+ and Ca^{++} which results in smooth muscle contraction

Indications

- to induce labor and stimulate uterine contractions
- also used to control postpartum bleeding

Risks

- can cause hypertonicity if the mother is hypersensitive
- when contractions too frequent, blood flow to the fetus decreases

Nursing Actions

- assess fetal presentation pelvic and adequacy
- assess intensity, frequency duration of contractions
 - if contractions are < 2 mins apart or are longer than 60 secs, infusion stop and call HCP
- monitor fetal and maternal HR
- monitor for s/sx of water intoxications

Terbutaline/Brethine - Tocolytic

A betamimetic drug that relaxes uterine smooth muscle.

Indications

- to delay preterm labor and to buy time for fetus to develop further from steroid therapy

Risks

- tremors, hypokalemia, pulmonary tachycardia, edema, hyperglycemia, nausea and vomiting

Nursing Actions

- monitor maternal and fetal HR
- monitor frequency and duration of contractions
- assess mother for dyspnea, rales/crackles as it can be signs of pulmonary edema

Magnesium Sulfate - Tocolytic

Delays the onset of pre-term labor and prevention of eclampsia only given intravenously

Indications

- to delay preterm labor and to buy time for fetus to develop further from steroid therapy

Risks

- hypotension, arrhythmias, drowsiness, muscle weakness, flushing, cardiac arrest, respiratory failure

Nursing Actions

- test deep tendon reflexes to assess for hypermagnesemia
- monitor intake and output
- assess vital signs frequently to monitor for signs respiratory depression or cardiac distress
- administer calcium gluconate as ordered as an antidote