

# LABOR DISORDERS

## Fetal Assessment: Stress Tests

### Non-stress Test

- Stimulate baby to get it to move
- Doppler monitor over mom where fetus' back is for best reading
- Have Toco monitor on mom to be sure no contractions or it's not a non-stress test
- Want to see heart rate = 120 – 160
- Want the peak of fetal heart rate to go up 15 bpm for 15 sec to know fetus can tolerate labor. If baseline = 120 – 130, acceleration must be at least 145.
- Must have at least 2 accelerations per 20 min

### Oxytocin Contraction Stress Test

- Give mom oxytocin → stimulate contractions
- Should have no change = Negative OCT (This is good.)
- If get deceleration = late deceleration = Positive OCT (This is NOT good.)

### Dystocia

Defined as failure to progress in labor

Problems with: uterine contractions, fetus, or birth canal

## UTERINE CONTRACTION PROBLEMS – INEFFECTIVE UTERINE FORCE

### Hypertonic contractions

- Frequent prolonged contractions that are not productive
- Increase in resting tone of > 15 mm Hg
- S/S: fatigue, pain, anoxia of muscle cells, fetal hypoxia → fetal distress
- Tx: rest – darken room, decrease stimulation, sedate

### Hypotonic contractions

- Start out OK, then stop being productive
- Resting tone stays under 10 mmHg & strength of contractions not 25 mm Hg
- Risk factors: multiple pregnancies, analgesia given too early in labor (before cervical dilation of 3 – 4 cm)
- Tx: Ptosin to augment

### Uncoordinated contractions

## **Dysfunctional labor**

- Causes:
  - Analgesia give too early or too much given
  - Mom has too narrow pelvis
  - Fetal position bad (posterior instead of anterior)
  - Overdistended uterus (multiple pregnancy, hydramnios, huge fetus)
  - Full rectum or bladder impeding fetal descent
  - Mom exhausted from labor
  - Primigravida
- Primary – at labor onset
  - Prolonged latent phase (>20 hrs in primipara; >14 hr multipara)
    - Uterus usually hypertonic but ineffective mild contractions
    - Tx: IVF I rest, MSO<sub>4</sub>
  - Prolonged active phase
    - R/T cephalopelvic disproportion or fetal malposition
    - Uterus usually hypotonic
  - Prolonged descent phase
    - Contractions start decreasing frequency & strength; dilation stops
    - Tx: IVF, IV oxytocin, squat/semi-Fowlers/kneel
- Secondary – later in labor
  - Most likely due to cephalopelvic disproportion
  - Oxytocin or Cesarean

## **Nursing Diagnoses:**

- High risk for fatigue r/t prolonged labor
- High risk for fluid volume deficit r/t length & work of labor & accompanying vomiting & diarrhea

## **Precipitate Labor**

- Labor completed in <3 hours due to very strong uterine contractions
- May cause subdural hemorrhage in fetus, lacerations of birth canal

## **Protracted labor**

- Over 24 hours
- Ptosin or amniotomy to stimulate. If still not progress → C-section

## **Precipitous labor**

- Less than 3 hours
- Risk of laceration, fetal distress / hypoxia

## **Preterm labor**

- Risk factors: very young or old mom, multiple gestation, very small mom
- Treatment: Tocolytics (terbutylene – beta-2 adrenergic, MgSO<sub>4</sub> – CNS depressant)
  - bed rest in hospital with mom on left side & monitored
  - Give betamethasone to increase fetal lung maturity
  - Keep well hydrated to keep pituitary from releasing oxytocin

### **Uterine Rupture**

- Most commonly r/t scar from previous cesarean section, but also caused by prolonged labor, bad presentation, multiple gestation, too much Pitocin given
- S/S: hemorrhagic shock
- Tx: Emergency C-section
- Shouldn't conceive again

### **Uterine Inversion**

- Uterus turned inside out
- May be due to extreme atony of uterus or traction on umbilical cord during delivery
- Tx: general anesthesia to relax pelvis & dr. pushes it back in ASAP or she can bleed out as uterus can't contract.

### **Amniotic Fluid Embolism**

## **PASSENGER PROBLEMS**

### **Cephalopelvic disproportion**

- Common with babies of diabetic moms (macrosomia)
- Macrosomia
- Diabetic mom or multiparous mom (each pregnancy, fetus increases size)
- Shoulder dystocia → must break clavicle to get them out vaginally
- C-section

### **Non-cephalic presentation**

- Breech --> high risk for prolapsed cord
  - C-section for most
- Face --> diameter of face too big to get through pelvis
  - May need C-section
- Transverse lie --> C-section

### **Cord prolapse**

- Risk factors: PROM, placenta previa, small fetus, cephalopelvic disproportion, fetal position not cephalic presentation
- S/S: Variable accelerations, visualized cord at vulva
- Tx: put mom in Trendelenburg or knee-chest position; cover exposed cord with sterile saline compress to px drying.
- If dilation incomplete --> C-section; If dilation complete, may deliver baby rapidly

## **PASSAGE PROBLEMS**

- Contraction of pelvic inlet or outlet