Intrapartum Complications

N124: Maternal/Child
Los Angeles County
College of Nursing and Allied Health
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AGENDA

- Assessment of the 4 P's
- Dystocia
- Prolonged pregnancy
- Intrauterine infection
- Premature ROM
- Preterm labor
- Alternative deliveries
- Intrapartum emergencies
- Communication
- Patient centered care
- Jeopardy!!!

2

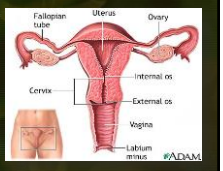
DYSFUNCTIONAL LABOR

- The 4 "P's"
  1. Powers
  2. Passenger
     - Position
  3. Passage
  4. Psyche

3

PRIMARY POWERS

- Ineffective UCs
  - Hypotonic
    - Coordinated but weak
  - Hypertonic
    - Erratic
    - High resting tone
- Treatment
  - Hypo: IVF, position change, amniotomy, oxytocin
  - Hyper: Pain relief, shower



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SECONDARY POWERS

- Ineffective maternal pushing
  - Fear or exhaustion
  - "Can't let go"
  - No urge to push
- Treatment
  - Rest, IVF
  - Position change
  - Decrease epidural

5

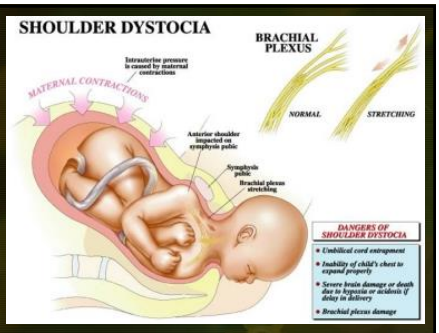
PASSENGER

1. Fetal size
   - Macrosomia
   - Shoulder dystocia
2. Fetal presentation
   - Rotation abnormality
   - Breech presentation
3. Multifetal pregnancy
4. Fetal anomalies

6

SHOULDER DYSTOCIA

McRobert's maneuver **Suprapubic pressure**



8

ABNORMAL LABOR DURATION

- Prolonged labor
  - Active phase
    - → 1 cm/hr primipara
    - → 1.2 cm/hr multipara
    - Infection / Exhaustion
- Precipitate labor (Abrupt strong UCs)
  - Birth within 3 hrs of labor onset
  - Complications
    - Abruption, PP hemorrhage

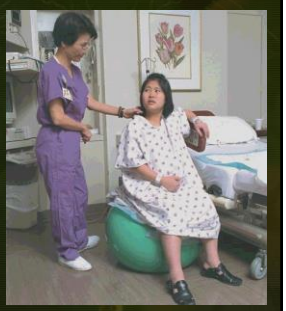
MATERNAL EXHAUSTION

- Causes
  - SOB, Fetal mvmt
- Signs/Symptoms
  - Verbal
  - Coping
  - VS/HR
- Nrsg Dx
  - Activity intolerance

10

UPRIGHT MATERNAL POSITIONS

Promotes fetal descent



With fetal head rotation

11

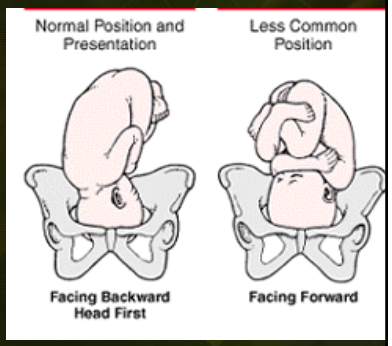
MATERNAL POSITION
THINK GRAVITY

MATERNAL POSITION

- Hands & Knees/ Side Lying
  - Rotation → OA
  - Decrease pain

13

FETAL POSITION

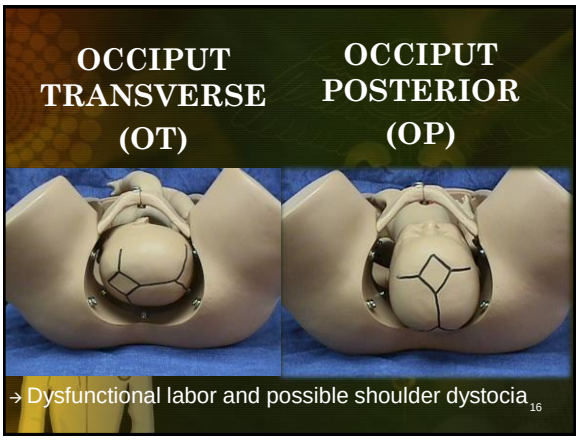


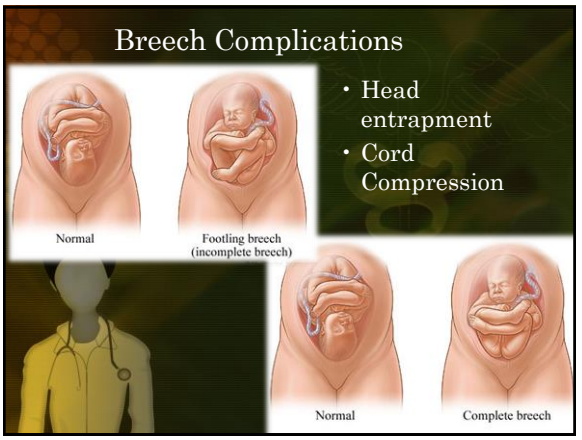
14

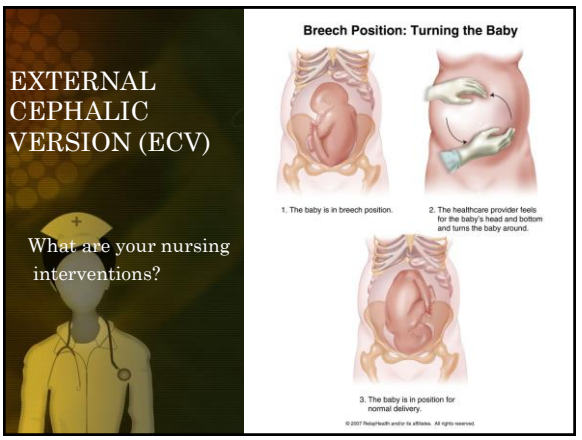
ANTERIOR FONTANEL

POSTERIOR FONTANEL

15


OCCIPUT TRANSVERSE (OT)
OCCIPUT POSTERIOR (OP)
→ Dysfunctional labor and possible shoulder dystocia
16

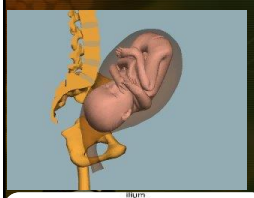

Breech Complications
• Head entrapment
• Cord Compression
Normal
Footling breech (incomplete breech)
Normal
Complete breech

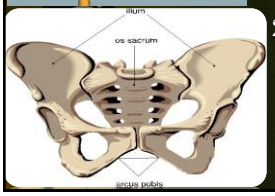

EXTERNAL CEPHALIC VERSION (ECV)
What are your nursing interventions?
Breech Position: Turning the Baby
1. The baby is in breech position.
2. The healthcare provider feels for the baby's head and bottom and turns the baby around.
3. The baby is in position for normal delivery.

Nuchal Cord

19

PASSAGE

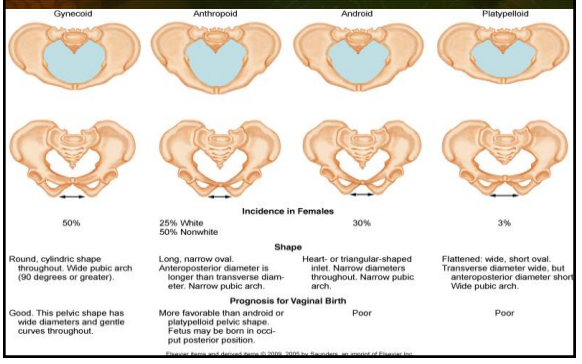




1. Pelvis
   - Impedes labor
   - Obstructs fetal passage
   - Cephalopelvic disproportion
2. Maternal soft tissue obstructions
   - Full bladder
     - Assess for distention Q 1-2 hrs

20

PELVIC SHAPE

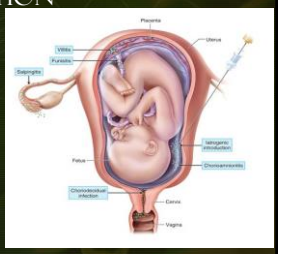


PSYCHE

- A perceived threat
  - Pain
  - Fear
  - Nonsupport
  - Personal situation
- What nursing interventions aid the mother and her family in relaxation?

22

INTRAUTERINE INFECTION

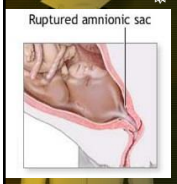


- Assessment
  - FHR ~ flat & tachy
  - Amniotic fluid
  - Maternal temp/VS
  - Uterine tenderness
- Reduce risk of infection
  - Limit exams, hand washing, clean pads
  - Notify HCP of infection

23

PREMATURE RUPTURE OF MEMBRANES

- Spontaneous rupture of the amniotic sac before onset of true labor, regardless of gestational age
- Causes
  - GBS and STI
  - Cervix, uterine overdistention



24

PREMATURE RUPTURE OF MEMBRANES

- Treatment
  - Determine actual rupture
  - Assess fetal well-being
    - Cord prolapse: twins
  - Prevent infection: Abx
  - Bedrest
  - Teaching
    - No intercourse, no nipple stim. and temp QID

25

PRETERM LABOR & BIRTH

- Uterine contractions resulting in cervical change after 20 weeks, but prior to the end of 37 weeks.
- S/S
  - Cramping, pelvic pressure
  - Low intermittent back pain

26

PRETERM LABOR

- Fetal concern
- Causes
  - Infection, No PNC, OB conditions
- Risks
  - Lung Maturity
    - < 34 weeks
  - PROM
- Table 27-2 risk factors

PRETERM LABOR

- Management
  - Prevention
    - Improve access to care
    - Identify risk factors
    - Patient education
    - Community education

28

PRETERM LABOR MANAGEMENT

- Treatment
  - Medications
    - Tocolytics
  - Education
    - Hydration
    - Bedrest

29

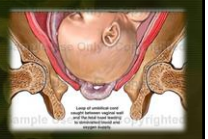
PROLONGED PREGNANCY

- > 42 weeks
- Complications
  - Aging placenta → Fetal compromise
  - Meconium passage
- Diagnostic
  - Biophysical Profile

30

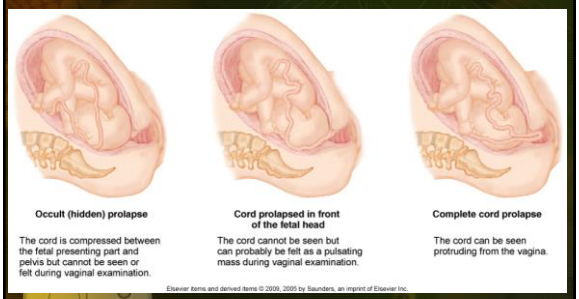
Prolapsed Umbilical Cord

- Cord slips down after ROM → compression between fetus & pelvis
- Causes
  - High station
  - Small fetus
  - Twin B, breech
- Treatment
  - Position
  - Lift presenting part/O2



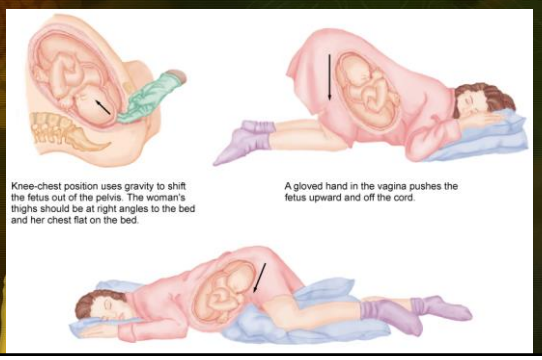
32

Prolapsed Cord



33

Prolapsed Cord



DYSTOCIA

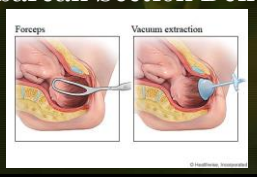
- Long, difficult or abnormal labor

Causes
- 4 "P's
- Dysfunctional labor
- Maternal responses
- Induction of labor

35

ALTERNATIVE DELIVERIES

1. Forceps Assisted Vaginal Delivery
2. Vacuum Assisted Vaginal Delivery
3. Cesarean Section Delivery



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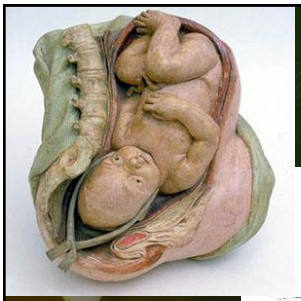
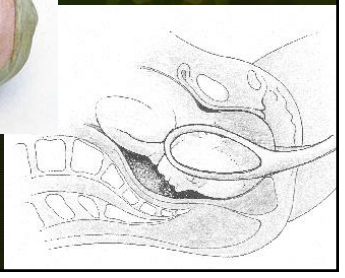


FORCEPS



ROTATION & DECENT

FORCEPS MARKING

- Nerve damage
- Brain damage → Cerebral palsy

VACUUM ASSISTED DELIVERY

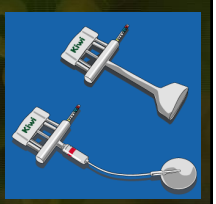
VACUUM ASSISTED DELIVERY

Maternal Indications

- Severe cardiac or cerebrovascular disease
- Ineffective pushing
- Exhaustion

Fetal Indications

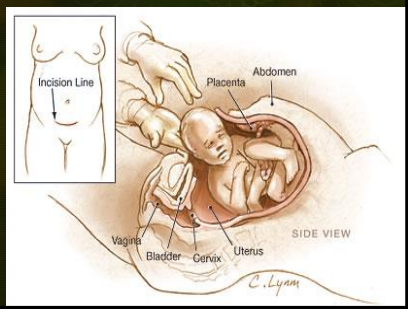
- Prolonged stage II of labor
- Category III fetal heart tones

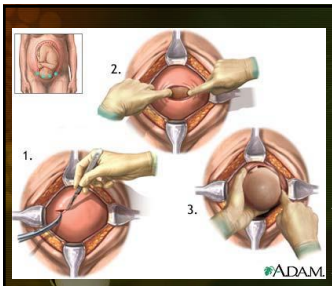


40

CESAREAN DELIVERY

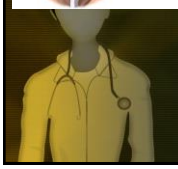
- 32.7% (2015) of U.S. deliveries
- 2 for 1 method Cesarean Video





Cesarean Indications

1. Maternal health problems
2. Fetal position
3. Pelvimetry
4. Fetal distress



CESAREAN COMPLICATIONS

- Dehiscence
- Blood loss
- DVT
- Surgical
- VBAC

UTERINE RUPTURE

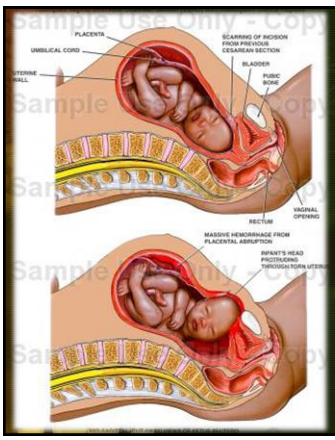
- Tear in uterine wall d/t pressure
- → VBAC & previous classic Csec
  - Complete
    - Into peritoneal cavity
  - Incomplete
    - Into peritoneum that covers uterus
  - Dehiscence
    - Partial separation
    - Common in diabetic clients

44

UTERINE RUPTURE

- Causes
  - Previous classical cesarean
  - Other uterine surgeries
- Signs and Symptoms
  - Abd. pain or between scapula, absent FHT, UCs cease, or tenderness
- Treatment
  - Crash cesarean

45

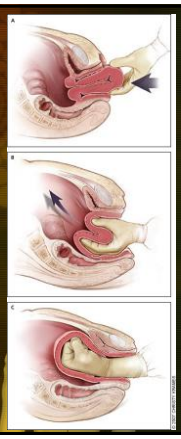


UTERINE RUPTURE

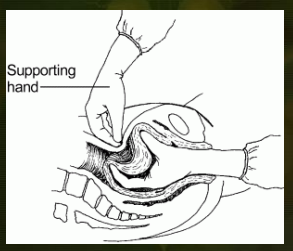
UTERINE INVERSION

- Uterus turns completely or partially inside out
- Etiology
  - Fundal pressure, tugging on cord, or adherence
- Signs and Symptoms
  - Massive hemorrhage, shock, and pain
- Treatment
  - Replace uterus
  - Gen. anesthesia, transfusion, tocolytic…
  - Hysterectomy

47



UTERINE INVERSION



48

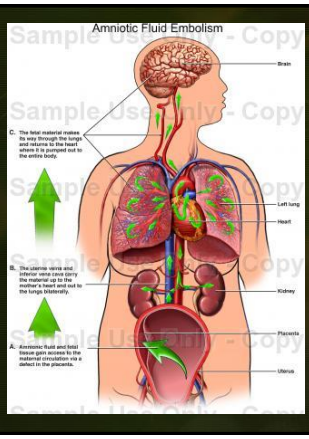
AMNIOTIC FLUID EMBOLISM

- Amniotic fluid is drawn into maternal circulation to the woman's lungs
  - Etiology
    - High pressure forces amniotic fluid with fetal particulate matter into open uterine or cervical veins
  - Treatment
    - CPR, intubate, transfusion, csec

49

AMNIOTIC FLUID EMBOLISM

SIGNS & SYMPTOMS



Sample Use Only - Copy

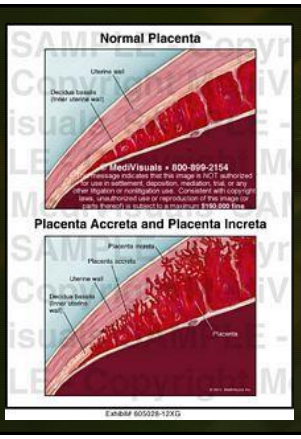
PROBLEMS WITH THE PLACENTA

- Accreta (80%)
  - Abnormally adherent placenta
  - Small fragments prevent full uterine contraction
  - Immediate or delayed hemorrhage
- Increta (15%)
  - Invades myometrium
- Percreta (5%)
  - Penetrates myometrium
  - Can perforate uterus or bowel

PLACENTA ACCRETA & PREVIA

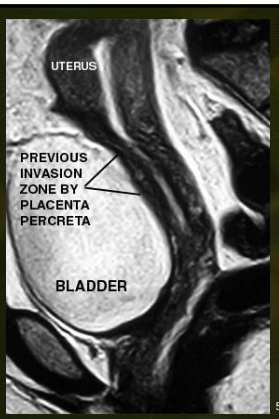
52

PLACENTA INCRETA



53

PLACENTA PERCRETA



54

TRAUMA

- Direct trauma
  - Pelvic fx → Skull fx or ICH
- Indirect trauma
  - Abruption or uterine rupture
- Maternal death #1 cause of fetal death
- Management
  - Kleihauer-Betke
  - Maternal stabilization

Trauma in Pregnancy Facts

- Trauma complicates 6-8% of pregnancies
- During 1st trimester fetus protected by pelvis
- Higher blood volume
- **Tx:** ABCs, O2, Volume resuscitation (IVx2), L Lateral decubitus position, cesarean

MVA	23%
GSW	21%
SW	14%
Strangulation	14%
BHT	9%
Burns	7%
Falls	4%
Toxic Exposure	4%
Drowning	2%
Iatrogenic Injury	2%

Pregnant Trauma Protocol

- Shield for all x-rays (UTS & MRI no effect)
  - Consult radiologist for rad > 5
- High flow O2
- Prevent Vena Cava Syndrome
  - 15 degree left tilt in C-Spine
- Postmortem C-sec in all pregnancies >24 wks
  - C-sec w/in 20 min of maternal arrest
  - Ideally by 4 min

57

Patient Centered Care

- Knowledge:
  - Incorporates family-centered care for laboring mother
    - Communicating with patient & support person(s) about current status, including plan of care.
- Skills:
  - Encourage open, effective communication between patient, support person(s), and multi-disciplinary team.
  - Assessment, medications/O2, positioning, etc.
- Attitude:
  - Provide emotional support to patient and support person(s) and encourage support for one another.

58

QUESTIONS?
"When you are a nurse you know that every day you will touch a life or a life will touch yours."
59