XVI. COMPLICATIONS OF MATERNITY

A. Miscarriage (Spontaneous abortion):

1. S/S:
   - Spotting and cramping
     
     Spotting is common during pregnancy, but the combination of ________ and ____________ is more indicative of a miscarriage.

2. Tx:
   a. Measure hCG levels - we worry when levels __________________
   b. Bedrest and _________ rest (abstinence from sex)
   c. If miscarriage imminent → IV, Blood, D&C (dilatation & curettage)

B. Hydatidiform mole (molar pregnancy):

1. Patho:
   a. Benign neoplasm, can turn malignant
   b. Grape-like clusters of vesicles
   c. May/may not have a fetus involved (for NCLEX purpose no fetus is involved)

2. How does this pregnancy start?
   - Uterus enlarges too __________

3. S/S:
   a. Absence of FHTs
   b. Bleeding (sometimes will have vesicles)

4. Dx:
   - Confirmed with ________________
5. Tx:
   a. Small mole → D&C (have to empty the uterus)
   b. Do not get _______________ during follow up time; follow-up is very important
   c. If it becomes malignant, it is called choriocarcinoma.
   d. Will do __________  ________________ to determine metastasis.
   e. Will measure hCGs ___________ until normal; rechecked q2-4 weeks; then every 1-2 months for 6 months to a year.

C. Ectopic Pregnancy:
   1. Definition:
      a. This is a gestation outside of the _________________.
      b. Where does it usually occur? Fallopian tube.
      c. Confirmed with an ________________

   2. S/S:
      a. First sign?
      b. Client will usually exhibit the usual S/S of ________________ … then pain, spotting or may be bleeding into the peritoneum.
         • If the fallopian tube ruptures, vaginal bleeding may be present.
      c. If a client has had 1 ectopic pregnancy, she is at risk for another.

   3. Tx:
      a. Methotrexate (Rheumatrex®/Trexall®) is given to mom to stop the growth of the embryo to save the tube.
      b. If the methotrexate (Rheumatrex®/Trexall®) does not work, a laparoscopic incision will be made into the tube and the embryo will be removed.
         • The entire tube may have to be removed.
      c. A laparotomy is done if the tube has ruptured or if the ectopic pregnancy is advanced.
         • If the tube does rupture, what are you worried about? ___________
D. Placenta Previa:

1. Patho:
   a. Most common cause of _________________ in the later months (usually the 7th).
   b. The placenta has implanted wrong.
   c. An ___________________________ will be done to confirm placental location

2. How does this happen?
   a. The placenta begins to prematurely separate when the cervix begins to dilate and efface → __________ doesn’t get oxygen
   b. Normally, the placenta should be attached where in the uterus? __________
      - The placenta may be on the side of the uterus (low lying placenta), halfway covering the cervix (partial previa), or completely covering the cervix (complete previa).
      - The problem: what is coming out first? ________________________

3. S/S:
   • Painless bleeding in 2nd half of pregnancy (may be spotting or may be profuse)

4. Tx:
   a. Complete previa usually requires hospitalization (from as early as 32 weeks until birth) to prevent blood loss and fetal ______________ if client goes into labor
   b. If there’s not much bleeding → ______________ and watch very close.
   c. Rule out other sources of bleeding such as abruption.
   d. _________ counts
   e. Monitor blood count and monitor _____________ closely.
   f. Monitor for contractions → call MD (not going to be a normal delivery)
   g. Delivery method of choice? __________ _________
   h. Do not perform ___________________________ exam
5. Fetal Complications:
   a. Preterm delivery
   b. Intrauterine growth retardation
   c. Fetal distress
   d. Anemia

6. Maternal Complications:
   a. Hemorrhage
   b. Potential DIC risk

E. Abruptio Placenta:
   1. Patho:
      a. Is the placenta implanted normally? _______
      b. May be partial or _________________
      c. It separates prematurely → bleeds (external or concealed)
         - Concealed means bleeding into the _________________.
      d. Seen in last half of pregnancy
      e. _________________ to confirm the diagnosis
         - May be partial or complete
         - Severity is based on a scale of 1-3 with 3 being the worst.
   2. Causes:
      a. MVC = motor vehicle crash
      b. Domestic violence
      c. Previous Cesarean Section
      d. Rapid decompression of the uterus (membranes rupture)
      e. Associated with _________________, PIH, & _________________
3. **S/S:**
   a. Rigid, board-like abdomen, with or without vaginal bleeding.
   b. Abdominal _____________ and increased uterine tone.
   c. Difficult to palpate fetus.

4. **Tx:**
   a. Method of delivery?
      - **RULE:** Do not do vaginal exams in the presence of unexplained vaginal bleeding
   b. Two priorities: manage fetal status and maternal ____________.

F. **Incompetent Cervix:**

1. **Patho:**
   a. This is when the cervix _________________________ prematurely.
   b. Occurs in the ________________ month of pregnancy
   c. This client will have a history of repeated, painless, ______________ trimester miscarriages.

2. **Causes:**
   - The weight of the baby causes pressure on the cervix causing it to prematurely dilate.

3. **Tx:**
   a. Purse-String suture (cerclage) at 14-18 weeks – reinforces the ____________
   b. May have a c-section to preserve the suture
      - Some physicians clip the suture so the client can deliver vaginally
   c. 80-90% chance of carrying the baby to ____________ after cerclage.
G. Hyperemesis Gravidarum:

1. Patho:
   a. Starts like regular morning _________________
   
   b. Excessive vomiting → dehydration → starvation → _________________

2. Causes:
   • R/T high levels of estrogen & _________________

3. S/S:
   a. What happens to the:
      BP ______ H/H _______ UO ______ K+ _______ Weight _______
   
   b. What will they have in their urine? _________________
      • Why is there acetone (ketones) in the urine?

4. Tx:
   a. NPO for _________________
   
   b. IVFs: _________________mL for 1st 24 hours
   
   c. Antiemetic
   
   d. Vitamins
   
   e. Environment? _________________
   
   f. Oral hygiene
   
   g. Is it okay to talk about food? _________________
   
   h. Why should the emesis basin be kept out of sight? _________________
   
   i. 6-8 small, dry feedings followed by _________________ ________________
   
   j. Foods/liquids should be _________________ or _________________
   
   k. Well-ventilated room
H. Preeclampsia:

1. Definition:
   a. Increased BP, proteinuria, edema after ________________ weeks.
   b. If mom’s pre-pregnant baseline BP is not known, then _________ is considered to be mild preeclampsia

2. S/S:
   a. Sudden _____________________ gain
   b. Face and hands swollen
      • Why? They are losing: ________________, fluid doesn’t stay in vascular space; it leaks into the ________________.
   c. Headache, blurred vision, seeing spots
   d. Hyper-reflexia (increased DTRs)
   e. Clonus → **Seizure**

When you see a client that gains 2 or more pounds in a week, watch closely and worry about PIH

3. Tx:
   a. Mild
      • BP 30/15 off their baseline, documented 6 hours apart.
      • Mild: __________ as much as possible.
      • Increase what in their diet? _______________________
      • They have glomerular damage with proteinuria.
   b. Severe:
      • BP elevated 160/110 documented 6 hours apart.
      • Sedation to delay __________________________
      • Magnesium Sulfate is the drug of choice
c. Magnesium sulfate: anticonvulsant, sedative, vasodilator

1) Vasodilation will increase __________________________ and helps avoid renal failure and increases placental perfusion.

2) Positioning: NEVER lay a pregnant lady on her back, because this will place pressure on the vena cava → impair kidney perfusion → impair cardiac output → impair kidney perfusion → impair placenta perfusion.
   - Always place pregnant lady on her ____________. (preferably left side)

3) Magnesium sulfate is a simple salt solution (hypertonic) → fluid is attracted back into the vascular space and out of the tissues → kidneys will diuresis → if kidney function is impaired, or shift occurs too fast → the client is at high risk for __________ __________.

4) Nursing action for client receiving magnesium:
   - When magnesium sulfate is used, checks for magnesium toxicity should be done q ____________.
   - These include: BP, respirations, DTRs, & LOC.
   - ________________ is monitored hourly & serum magnesium is checked periodically.
   - If magnesium sulfate is used, labor will stop unless augmented with Oxytocin (Pitocin®)

   We use magnesium sulfate for __________ labor.

d. If diastolic > 100 → apresoline (Hydralazine®) in combination with magnesium sulfate.
   - Side effects: ______________________

e. Only cure? ______________________

f. After delivery, the client is at risk for seizures for 48 hours.

4. Nursing Care:
   a. Single room
   b. Very quiet environment → decreasing __________
   c. Dim the lights, no TV
d. Additional treatment is steroid therapy:
   - Betamethasone (Celestone®) stimulates _____________ production in the alveolar spaces, and this causes less tension when the infant breathes.
   - Steroid therapy given between ____________ & _________ gestation to reduce infant mortality.
   - Expectant management: Balance the risk to mom vs. baby

I. Eclampsia:
   - What is the turning point from preeclampsia to eclampsia?

   1. Tx:
      - Monitor the FHTs.
      - Watch ________________.
      - Watch for ________________ failure.
      - Monitor for: heart failure, stroke, heart attack, renal failure, DIC, HELLP syndrome, neurological damage, and multisystem organ failure.

J. Premature Labor:

   1. Definition:
      - Labor that occurs between ____________ weeks

   2. Tx:
      a. Drug therapy to stop the labor:
         1) Tocolytic: Terbutaline (Brethine)
            - Side effects of Brethine? ________________ ______________ & hyperactivity.
         2) Mg Sulfate
3) Betamethasone (Celestone®)
   - Given IM to mom
   - The purpose is to stimulate maturation of the baby’s lungs in case preterm birth occurs.

b. Preterm labor can sometimes be stopped by ________________ mom and by treating vaginal and urinary tract ________________.

K. Prolapsed Cord:
1. Definition:
   a. When the umbilical cord falls down through ________________
   b. Most likely to happen when presenting part is not engaged and membranes ________________

2. Nursing Actions:
   a. Important to check ____________ when membranes rupture, either spontaneously or artificially.
   b. If cord is being compressed, you would see variable deceleration in FHT, so an immediate ________________ is indicated.

   Warning:
   c. If cord ceases to pulsate→ fetal ________________ has occurred;
      • We want the cord to pulsate because this tells us baby is getting some oxygen

3. Tx:
   a. Lift head off cord until physician arrives if possible
      • This is a manual lift, the nurse pushes the head up to relieve pressure on the ________________.
   b. Trendelenburg or ________________ chest position
   c. Administer oxygen
   d. Monitor fetal heart tones.
   e. Push it back in? ________________
L. Shoulder Dystocia:

1. Definition:
   a. Fetal head is delivered and further delivery of the fetus is prevented by the impaction of the fetal ___________ with the maternal ___________.
   b. Anterior shoulder of fetus becomes impacted by the symphysis pubis.

2. Risk to Fetus:
   a. Hypoxia → leads to cerebral palsy and asphyxia
   b. Brachial plexus injury - leading to Erb’s Palsy (drooping/paralysis of an arm caused by excessive traction and stretching of the brachial nerve at delivery)
   c. Broken ________________
   d. Bell’s palsy is paralysis of face with drooping of one side of the face.
   e. Caused from ________________
   f. Many resolve, but can lead to permanent damage.

3. Maternal Risk:
   a. Traumatic delivery leading to permanent damage.
   b. Bruised bladder.
   c. Extension of episiotomy
   d. Rectal tear
   e. Torn cervix and/or uterus

4. Who’s at risk:
   a. LGA or macrosomic infants >4000 grams
   b. Gestational diabetes
   c. Previous history of shoulder dystocia
   d. Post date delivery → large fetus
5. Nursing Care:
   a. ____________ maneuvers
   b. Mazzanti techniques
      • Never apply ____________ _______________. The physician must do this or call another physician.

M. Group B Streptococcus (GBS):
   1. Leading cause of neonatal morbidity.
   2. Routinely assess for GBS risk factors during pregnancy (cultured around 35-37 weeks) and on admission to L & D.
   3. Transmitted to infant from birth canal of the infected mother during delivery.
   4. Risk for fetus is only after rupture of membranes.
   5. Teaching: client needs to understand it is not a sexually transmitted disease (STD).
   6. Risk factors for neonatal GBS: Preterm birth less than 37 weeks, + prenatal cultures in current pregnancy, premature rupture of membranes (longer than 18hr), positive history for early-onset neonatal GBS, intrapartum maternal fever higher than 100.4°F, previous infant with GBS.
   7. Tx:
      • Prophylactic antibiotic therapy, Penicillin is drug of choice.