N432-Focus Sheet Unit 3—2020—Complications of Pregnancy, Labor, and Delivery

Ricci, Kyle & Carman Ch 19, 20 & 21; ATI Ch 7-10

Some of the problems which cause complications of Pregnancy as well as Labor and Delivery were discussed during Unit 1 e.g. some of the infections, and during Unit 2 on labor and delivery. So be sure and look at this information from Unit 1 & 2 as you work through this focus sheet. The information will be used to compare and analyze the normal versus the abnormal occurrences in order to make decision for nursing interventions. So, even while you fill out the focus sheet, be thinking about assessments and actions you "as a nurse" can make in the midst of these complications.

Bleeding during ; Medical Conditions; Early Onset of Labor

RKC Ch 19; ATI Ch 7, 9, 10 (Bleeding)

1. List 5 factors that can place a woman at risk during pregnancy.
    a. Smoking
    b. Emotional distress
    c. Infection
    d. Genetic Conditions
    e. Chronic hypertension
2. Define abortion, miscarriage, and stillbirth.
    a. Abortion: loss of an early pregnancy, usually before 20 weeks gestation
    b. Miscarriage: loss before the 20th week of gestation
    c. Stillbirth: loss of a fetus after the 20th week of development
3. Describe the following for spontaneous abortion: p687-688

Pathophysiology	Causes are often varied and unknown. During 1st trimester often due to fetal genetic abnormalities. During the 2nd trimester often due to maternal diseases such as: cervical insufficiency, congenital or acquired anomaly of the uterine cavity, hypothyroidism, diabetes, chronic nephritis, crack cocaine, inherited and acquired thrombophilias, lupus, polycystic ovary syndrome, severe HTN, acute infection- rubella, cytomegalovirus, herpes simplex virus, bacterial vaginosis, toxoplasmosis
Nursing Assessment	Varying degrees of vaginal bleeding, low back pain, abdominal cramping, passage of products of contraception tissue. Ask about color of vaginal bleeding(bright red is significant), amount and frequency of bleeding(saturation of 1 pad hourly), passage of clots of tissue. Assess VS, have her rate her pain, evaluate amt and intensity of abdominal cramping or contractions. Thorough assessment helps to identify which type of spontaneous abortion

Testing	hcG levels
Management	Provide continuous monitoring and psychosocial support Monitor vaginal bleeding, pain, prepare for procedures, administer RhoGAM
Patient education needs	Reactions vary. Explain causes, grieving period may last up to 2 years, family and friends should provide extra support during this time, refer to community support groups

4. Define threatened abortion, inevitable abortion, incomplete abortion, complete abortion, missed abortion and habitual abortion. P 689
    a. Threatened abortion- vaginal bleeding early in pregnancy, no cervical dilation or change in cerival consistency, mild abdominal cramping, closed cervical os, no passage of fetal tissue
    b. Inevitable abortion-vaginal bleeding, rupture of membranes, cervical dilation, strong adominal cramping, possible passage of products of coneption
    c. Incomplete abortion - intense abdominal cramping, heavy vaginal bleeding, cervical dilation
    d. Complete abortion- history of vaginal bleeding and abdominal pain, passage of tissue with subsequent decrease in pain and significant decrease in vaginal bleeding
    e. Missed abortion- nonviable embryo retained inutero for at least 6 wks, absent uterine contractions, irregular spotting, possible progression to inevitable abortion
    f. Habitual abortion- history of 3 or more consecutive spontaneous abortions, not carrying the pregnancy to viability or term
5. What are the actions and implications of the use of Cytotec, Cervidil (dinoprostone)/Prepidil(Gel), Rh Immunolglobulin Rhogam related to abortions (elective or spontaneous)? Chart p 690
    a. Cytotec
        i. Action: stimulates uterine contractions to terminate a pregnancy, to evacuate the uterus after abortion to ensure passage of all the products of conception
        ii. Implication: monitor for diarrhea, abdominal pain, nausea, vomiting, dyspepsia, assess vaginal bleeding and report any increased bleeding, pain, or fever; monitor for S&S of shock→ tachycardia, hypotension, anxiety
    b. Cervidil
        i. Acts as progesterone antagonist, allowing prostaglandins to stimulate uterine contractions; causes the endometrium to slough; may be followed by administration of misoprostol w/in 49 hours
        ii. Monitor for headache, vomiting, diarrhea, and heavy bleeding; anticipate admin of antiemetic prior to use to reduce nausea and vomiting; encourage client to use acetaminophen to reduce discomfort from cramping
    c. Prepidil(Gel)
        i. Stimulates uterine contractions, causing expulsion of uterine contents, to expel uterine contents in fetal death or missed abortion during second trimester, or to efface and dilate the cervix in pregnancy at term

ii. Bring gel to room temperature before administering, avoid contact with skin, use sterile technique, keep client supine for 30 min after administering, document time of insertion and dosing intervals, remove insert w/ retrieval system after 12 hrs or at the onset of labor, explain purpose and expected response to client

d. Rh immunoglobulin/RhoGAM
   i. Suppress immune response of non sensitized Rh-negative clients who are exposed to Rh-positive blood; to prevent isoimmunization in Rh-negative women exposed to Rh positive blood after abortios, miscarriages, and pregnancies
   ii. Administer IM into deltoid, give only MICRhoGAM for abortions and miscarriages <12 wks unless fetus or father is Rh negative, educate that she will need this after deliveries if newborns are Rh positive; also check lab study results prior to administering the drug

6. Describe the following for ectopic pregnancy:

Pathophysiology	Ovum implants outside the uterus, common site for implantation is fallopian tubes, ovary, intestine, cervix, abdominal cavity→ none of which can accommodate a growing embryo
Nursing Assessment	Determine the existence of an ectopic pregnancy & whether or not it ha ruptured, assess for S&S, typically around 7-8 wks gestation, missed period, adnexal fullness, tenderness; pain may be unilateral,bilateral, or diffuse, review the client's history, watch for S&S of rupture or hemorrhage
Testing	Transvaginal ultrasound, low levels of serum beta hcG
Management	Administer analgesics, explain medications, review S&S of AE, monitor VS, bleeding, pain status, prepare client physically and psychologically for surgery, provide emotional support.
Patient education needs	Reduce risk factors: sex w/ multiple partners, avoid contracting STIs that can lead to PID, obtain early diagnosis and treatment of STIs, if IUD is used, avoid smoking, use condoms, seek prenatal care, previous ectopic pregnancy puts them at greater risk.

7. Describe the following for Gestational Trophoblastic Disease.

Pathophysiology	The tumor comes from gestational, not maternal tissue. The mole does not contain any fetal tissue and is fertilized by the sperm, thus, causing the egg to die. No embryonic tissue is found due to no circulation being present. Complete mole can lead women to have vaginal bleeding, anemia, excessively enlarged uterus, preeclampsia, and hyperemesis. A partial mole

	causes women to have a missed or incomplete abortion, including vaginal bleeding and a normal or small for date uterus. Trophoblastic cells proliferate and the chorionic villi become edematous which causes the grape-like clusters. The most common site of metastasis is to the lungs, lower genital tract, liver, and brain.
Nursing Assessment	Assess the woman at each antepartal visit and be alert for the following: ● Report early signs of pregnancy like amenorrhea, fatigue, and breast tenderness ● Brownish vaginal bleeding/spotting ● Anemia ● Inability to detect a fetal heart rate after 10-12 weeks' gestation ● Fetal parts no evident with palpation ● Bilateral ovarian enlargement caused by cysts and elevated levels of hCG ● Persistent, often severe, nausea and vomiting (due to high hCG) ● Fluid retention and swelling ● Uterine size larger than expected for pregnancy dates ● Extremely high hCG levels (no single value considered diagnostic) ● Early development of preeclampsia (usually after 24 weeks) ● Absence of fetal heart rate or fetal activity ● Expulsion of grape-like vesicles
Testing	The extremely high hCG levels and vesicular molar pattern appearance is made for the diagnosis. A transvaginal ultrasound of the uterus is used to visualize the vesicular molar pattern. After mole evacuation, a baseline pelvic exam and ultrasound of the abdomen needs done. Serum hCG analysis after molar pregnancy is done weekly for 3 weeks, and then monthly for 6 months up to 1 year to detect GTD.
Management	The nurse needs to prepare the client for a D&C. The nurse needs to give emotional support.
Patient education needs	The client needs to be educated on the importance of strict adherence needed with the follow-up program. The client needs to understand the importance of follow-up care to help improve the chance of future pregnancies and continue her quality of life. The client needs to be informed of possible chemotherapy, and needs to use a reliable contraceptive form for 1 year, but avoid an IUD.

8. When would you anticipate that Methotrexate would be prescribed?

   Methotrexate could be started prophylactically

9. Describe the following for Cervical Insufficiency:

Pathophysiology	Exact pathophysiology is unknown, but it is thought less elastin, less collagen, and greater amounts of smooth muscle than the normal cervix that causes loss of sphincter tone. The pressure of the expanding uterine becomes greater than the ability of the sphincter to stay closed, causing the sudden relax of the cervix, and effacement and dilation occur. Cervical dilation is quick and with small vaginal bleeding. Cervical insufficiency is the end point of congenital cervical hypoplasia, in utero DES exposure, and cervix to the trauma. Prolonged second stage of labor, increase of relaxin, progesterone, and uterine volume are connected with cervical insufficiency. Cervical length and preterm birth are also connected with cervical insufficiency.
Nursing Assessment	Risk factors ● History of cervical trauma (cervical tears from previous deliveries, excessive dilations, curettage for biopsy, and surgical procedures involving the cervix), short labors, pregnancy loss in early gestation, or advanced cervical dilation at early weeks of gestation ● In utero exposure to diethylstilbestrol, ingested by the client during pregnancy ● Congenital structural defects of the uterus or cervix Expected findings -- increase in pelvic pressure or urge to push ● Pink-stained vaginal discharge or bleeding ● Possible gush of fluid (ROM) ● Uterine contractions with the expulsion of the fetus ● Postoperative (cerclage) monitoring for uterine contractions, ROM, manifestations of infection
Testing	● Ultrasound ○ Showing a short cervix ○ Presence of cervical funneling ○ Effacement of the cervical os indicates reduced cervical competence ● Prophylactic cervical cerclage

	○ Surgical reinforcement of the cervix with a heavy ligature that is placed submucosally around the cervix to strengthen it and prevent premature cervical dilation ○ Best results occur if this is done at 12-14 weeks gestation ○ Cerclage is removed at 36 weeks of gestation or what spontaneous labor return
Management	● Report: ○ Preterm labor ○ ROM ○ Infection ○ Strong contractions less than 5 mins apart ○ Severe perineal pressure ○ Urge to push
Patient education needs	● Adhere to activity restriction or bed rest ● Increase hydration to promote relaxed uterus ● Avoid intercourse ● Monitor for cervical/uterine changes ● Cervical cerclage might be required, often placed 12-14 weeks gestation and removed at 38 weeks gestation

10. Describe the following for Placenta Previa:

Pathophysiology	Placental implantation in the lower uterine segment over the OS of the cervix during the 2nd or 3rd trimester
Nursing Assessment	Pt. reports heavy <u>bright red vaginal bleeding</u> that began spontaneously & is <u>NOT accompanied by contractions.</u> Pt. reports she can feel the baby moving.--> Painless and bright red
Testing	Ultrasonography
Management	Monitoring maternal vital signs, I&Os vagianal bleeding, and physiological status for signs of hemorrhage, shock, or infection. Monitor fetal heart tones

	for distress/ treat fetal distress is necessary, give prescribed medications, IV fluids, and blood products, provide education, assess anxiety level, Pelvic rest, nothing in the vagina, Assessing vaginal bleeding- pad counts and weights, c-section
Patient education needs	Report any additional bleeding episodes and come in for an examination.

11. Why is it important to know if a woman who is presenting to labor and delivery has a placental previa?
    a. How would her care be altered?

The client can hemorrhage; therefore, requiring quick administration of blood products. It is important to have the client's blood cross-matched. The client needs an IV access for blood products. Rh immunoglobulin if the client is Rh negative at 28 weeks' gestation. Tocolytic is monitored to prevent a preterm labor.

12. Describe the following for Abruptio Placentae (Abruption):

Pathophysiology	The placenta pulls away or separates from the uterine wall, can be caused by blunt force trauma, drugs, HTN (most common)
Nursing Assessment	Pt. reports heavy dark red vaginal bleeding that began spontaneously & is accompanied by contractions & abdominal pain like is knife like. Pt. reports she can feel the baby moving but indicates movement has slowed down dramatically.--> Medical emergency and can lead to maternal &/or fetal demise
Testing	Labs: CBC, PT/aPTT, type & cross match, BPP
Management	Monitor for D.I.C-àoozing from puncture/IV sites, petechiae, spontaneous bleeding gums, nose bleeding, hematuria, or other signs of bruising, Monitor bleeding, Tissue perfusion, Left lateral position, Bed rest, VS, Continuous EFHM, Support & education→ can give birth C-section if fetus is still alive, vaginally if there is fetal demise
Patient education needs	Educate client on medications given, positioning, signs and symptoms, and on support available

13. Describe shoulder dystocia **RKC Ch 13 p 464 Ch 21 p 797 & 806**

Shoulder dystocia is when the shoulds of the fetus are blocking descent and birth after the fetal head has already been delivered.

14. . In your own words describe Disseminated intravascular coagulation (DIC).

There is an imbalance of thrombin and plasmin, which causes too much break down of clots, thus causing hemorrhaging. Too many blood clots are formed, and causes the clotting factors to be used up leading to bleeding when tissue injury happens.

15. Describe the following for Hyperemesis Gravidarum

Pathophysiology	The exact mechanism of nausea and vomiting is unknown, but the decreased placental blood flow, maternal blood flow, and acidosis can threaten the lives of the mother and fetus. Elevated hCG levels are elevated early in the pregnancy, which correlates with nausea and vomiting, and in hyperemesis gravidarum the hCG levels are higher than usual and extend past the 12 week mark. Dehydration and decreased fluid intake can cause hCG levels to increase, which then causes nausea and vomiting. Some other theories for hyperemesis gravidarum are: endocrine, where estrogen and hCG are elevated; metabolic, where there is a deficiency in vitamin B 12; genetic factors that could predispose the mother to this condition; psychological stress that increases the symptoms.
Nursing Assessment	Health and physical: onset, duration, and course of nausea and vomiting; any medications or treatments she has used and its effectiveness; diet history; any complaints of excessive salivation, anorexia, indigestion, and abdominal pain or distention; any blood or mucus in stool; risk factors such as young age, nausea, vomiting with previous pregnancy, history of intolerance of oral contraceptives, nulliparity, trophoblastic disease, multiple gestation, emotional or psychological stress, GERD, primigravida status, obesity, hyperthyroidism, H. pylori seropositivity, weigh the client and compare with previous weight to not a 5% weight loss; inspect mucus membranes for dryness and skin turgor; hypertension; note any depression, anxiety, irritability, mood changes, and decreased ability to concentrate; determine support system.
Testing	Liver enzymes, CBC, urine ketones, TSH and T4, BUN, urine specific gravity, serum electrolytes, ultrasound

Management	Promoting comfort and nutrition, the client will be NPO to all GI rest, administer antiemetics and IV fluids, administer electrolyte replacements, oral care, provide an environment clear of pungent odors, and gradually introduce oral fluids and foods in small amounts when nausea and vomiting has subsided. Providing support by listening to the client's concerns, feelings, answering questions, offering reassurance, may need to refer the client to a spiritual advisor, suggest possible local or national support groups, arrange possible home-care, timely counseling, balanced nutrition, pharmacotherapy, and emotional support.
Patient education needs	● Avoid noxious stimuli ● Avoid tight waistbands to minimize pressure on abdomen ● Eat small, frequent meals throughout the day (6 small meals) ● Separate fluids from solids by consuming fluids in between meals ● Avoid lying down or reclining for at least 2 hr after eating ● Use high-protein supplement drinks ● Avoid foods high in fat ● Increase your intake of carbonated drinks ● Increase exposure to fresh air to improve symptoms ● Eat when you are hungry, regardless of normal mealtimes ● Drink herbal teas containing peppermint or ginger ● Avoid fatigue and learn how to manage stress in life ● Schedule daily rest periods to avoid becoming overtired ● Eat foods that settle the stomach (dry crackers, toast, soda)

16. What three medications are commonly used for hyperemesis gravidarum? What nursing considerations should be addressed for each of these?

- Promethazine (Phenergan)
    - Be alert for urinary retention, dizziness, hypotension, and involuntary movements
    - Institute safety measures to prevent injury secondary to sedative effects
    - Offer hard candy and frequent rinsing of mouth for dryness
- Prochlorperazine (Compazine)
    - Be alert for abnormal movements and for neuroleptic malignant syndrome such as seizures, hyper/hypotension, tachycardia, and dyspnea
    - Assess mental status, and intake/output
    - Caution client not to drive as a result of drowsiness or dizziness
    - Advise to change position slowly to prevent/minimize orthostatic hypotension
- Ondansetron (Zofran)
    - Monitor for possible side effects:
        - Diarrhea
        - Constipation
        - Abdominal pain

        - Headache
        - Dizziness
        - Drowsiness
        - Fatigue
    - Monitor liver function tests, if ordered

17. What is the difference between chronic and gestational hypertension?

Chronic hypertension was present before pregnancy, or develops before the woman reaches 20 weeks' gestation. Gestational hypertension is when the blood pressure is higher than 140/90 mm Hg after 20 weeks' gestation without proteinuria. By 12 weeks' postpartum, the woman will return to normal blood pressure range.

18. Please fill in the table below:

	Mild Preeclampsia	Severe Preeclampsia	Eclampsia
Blood pressure	>140/90 mm Hg after 20 weeks' gestation	>160/110	>160/110
proteinuria	300 mg/24 hr or greater than 1+ protein on a random dipstick urine sample	>500 mg/24 hr; greater than 3+ on random dipstick urine sample	Marked proteinuria
Seizures/coma	No	No	Yes
hyperreflexia	No	Yes	Yes
Other signs or symptoms	Mild facial or hand edema, weight gain	Headache, oliguria, blurred vision, scotomata, pulmonary edema, thrombocytopenia, cerebral disturbances, epigastric/RUQ pain, HELLP	Severe headache, generalized edema, RUQ/epigastric pain, visual disturbances, cerebral hemorrhage, renal failure, HELLP
Treatment/management	• Bed rest • Antepartal visits and diagnostic	• Birth of infant is the only cure	• Clear airway • Administer adequate oxygen

	testing -- CBC, clotting studies, liver enzymes, and platelet levels ● BP daily monitored (4-6 hr when awake) ● Measure amount of protein in urine ● Weigh herself ● Take daily fetal movement counts ● Balanced, nutritional diet with no sodium restriction ● 6-8 eight oz glasses of water ● If home management fails → admit to hospital ● IV magnesium sulfate to prevent seizures, calcium gluconate in take to magnesium reaches toxic levels	● Management of hypertension, preventing seizures, preventing long term morbidity and preventing maternal, fetal, or newborn death ● Oxytocin given to mother during birth, along with magnesium sulfate ● Vaginal delivery preferred, but C-section is needed if client is seriously ill ● pediatrician/neonatologist or neonatal nurse practitioner should be available in birthing room ● Infant whose mother received high doses of magnesium needs assessed for	● Position on left side, and protect from injury during seizure ● Suction equipment must be nearby ● IV fluids after seizure at a rate to replace urine output and additional insensible losses ● Fetal heart rate needs monitored ● Magnesium sulfate administered to prevent further seizures ● Hypertension is managed through hypertensive medications ● If woman is stable after seizure, birth via induction of C-section is done ● If stable after postpartum she will be transferred to the

		respiratory depression, hypocalcemia, and hypotonia	postpartum unit, but if unstable she will be transferred to the CCU

19. We will discuss in class the protein/creatinine (P/C) ratio. This is not in your text. Here is a

Urine protein tests detect and/or measure protein being released into the urine. Normal urine protein elimination is less than 150 mg/day and less than 30 mg of albumin/day. Elevated levels may be seen temporarily with conditions such as infections, stress, pregnancy, diet, cold exposure, or heavy exercise. Persistent protein in the urine suggests possible kidney damage or some other condition that requires additional testing to determine the cause.

20. Medications used with preeclampsia and eclampsia

Medication	Indications (why is this needed for THIS patient?)	Nursing Implications (what are you watching for?)	Dose
Magnesium Sulfate	Blockage of neuromuscular transmission, vasodilation Prevention & treatment of eclamptic seizures	- Monitor serum Mg2+ - assess DTRs, ankle clonus - have Ca2+ gluconate readily available in case of toxicity	4-6 g IV in 100 mL followed by 2 g
Hydralazine hydrochloride (Apresoline)	Vascular smooth muscle relaxant, thus improving perfusion to renal, uterine, and cerebral areas Reduction in BP	Use parenteral form immediately after opening Withdraw drug slowly to prevent possible rebound HTN Monitor for adverse effects such as palpitations, headache,	5-10 mg by slow IV infusion Q20 min

		tachycardia, anorexia, nausea, vomiting, diarrhea	
Labetalol hydrochloride (Normodyne)	Alpha 1 and beta blocker Reduction in blood pressure	Be aware drug lowers BP w/o decreasing maternal heart rate or CO Monitor for gastric pain, flatulence, constipation, dizziness, vertigo, fatigue	Administer IV dose 20-40 mg q15 min
Nifedipine (Procardia)	Calcium channel blocker/dilation of coronary arteries, arterioles, peripheral arterioles Reduction in BP , stoppage of preterm labor	Monitor for dizziness, peripheral edema, angina, diarrhea, nasal congestion, cough	Administer 10-20 mg orally for 3 doses q4-8 hr

21. What are the signs of Magnesium toxicity? What is the therapeutic level for magnesium sulfate? What drug should always be at the bedside of a patient who has Magnesium sulfate infusing?

    Symptoms of toxicity - flushing, sweating, hypotension, cardiac and nervous system depression, diminished STR, bradycardia, urine output <25-30 ml, respirations <12

    Therapeutic level - 4-6g IV in 100ml fluid in 30-60 min, with a maintenance dose of 2g continuous IV

    Always have Calcium gluconate to reverse magnesium toxicity

22. When grading a deep tendon reflex, does the grading scale of 0-4 state no movement is graded as a 0 or a 4?

No movement is graded as a 0. The scale for DTR is:

- Grade 0
    - Reflex absent, none elicited
- Grade 1
    - Hypoactive response, sluggish
- Grade 2
    - Reflex in lower half of normal range
- Grade 3

    - Reflex in upper half of normal range
- Grade 4
    - Hyperactive, brisk, clonus present

23. What does clonus evaluate and what does a positive clonus look like?

Clonus evaluates for nervous system irritability related to preeclampsia. A positive clonus is the movement of ankle or calf muscle is jerky and rapid (rhythmic involuntary contractions), meaning there is CNS involvement.

24. What does HELLP stand for?

- Hemolysis
- Elevated liver enzyme
- Low platelet count

HELLP is a variant for the preeclampsia/eclampsia syndrome that occurs in 10-20% of those whose conditions are labeled as severe.

25. Describe the following for HELLP syndrome

Pathophysiology	Red blood cells become fragments and pass through small, damaged vessels, which elevates liver enzymes, and obstructs fibrin deposits which leads to liver impairment and hyperbilirubinemia. Low platelets are caused by
Nursing Assessment	Similar to a woman w/ preeclampsia. N/V, malaise epigastric or RUQ pain, edema
Testing	Low hct, elevated LDH, elevated AST & ALT, Elevated BUN, elevated bilirubin, elevated uric acid & creatinine, low platelet
Management	Lower BP with with rapid acting antihypertensives, prevention of convulsions or further seizures with mag sulfate, and use of steroids for fetal lung maturity. FFP, packed RBCs or platelets
Patient education needs	Educate on management and medications to be given. Risks

26. What is Rh factor incompatibility? When is RhoGAM administered? Who is at risk if it is not given?
    a. Rh negative mom is exposed to Rh positive blood cells and begins to develop circulating titers of Rh antibodies
    b. Rh negative mom and Rh positive baby
    c. RhoGAM is administered after any event in which blood transfer may occur
        i. Given between 28-32 weeks and again w/in 72 hours after giving birth
    d. Ectopic pregnancy, chorionic villus sampling, amniocentesis, prenatal hemorrhage, molar pregnancy, maternal trauma, percutaneous umbilical sampling, therapeutic or spontaneous abortion, fetal death, fetal surgery

27. What fetal risks are associated with polyhydramnios and oligohydramnios?
    a. Cord compression, postmaturity, congenital anomalies, respiratory difficulty

28. Define multiple gestation and explain why it may be concerning for the mother/fetus.
    - Multiple gestation is defined as a pregnancy with two or more fetuses
    - Mother
        - High risk for preterm labor
        - Polyhydramnios
        - Hyperemesis gravidarum
        - Anemia
        - Preeclampsia
        - Antepartum hemorrhage
    - Fetal/newborn
        - Prematurity
        - Respiratory distress syndrome
        - Birth asphyxia/perinatal depression
        - Congenital abnormalities
        - Twin-twin transfusion syndrome
        - Intrauterine growth restrictions
        - Becoming conjoined twins
29. What do monozygotic and dizygotic mean?
    - Monozygotic twins- where the fetus share one placenta, two amions, and one chorion
    - Dizygotic twins- where each fetus has its own placenta, amnion, and chorion
30. Describe the following for Premature rupture of membranes:

Pathophysiology	Rupture of the bag of waters before the onset of birth. Infection, prolapsed cord, abruptio placentae, and preterm labor→ assoc. Conditions. PROM is associated w/ vaginal bleeding, placental abruption, microbial invasion of amniotic cavity, defective placentation. Often occurs spontaneously

Nursing Assessment	Review maternal risk factors, ask about any present infections(UTI, pelvic or vaginal infection), S&S of labor, VS→ fever, FHR monitoring,
Testing	CBC→ elevation of WBCs
Management	Antibiotics, prevention of infection, no unsterile cervical exam until woman is in active labor, monitor temperature, FHR,
Patient education needs	Monitor baby's activity by performing fetal kick counts daily, check your temperature daily, watch for signs of labor, avoid touching or manipulation of your breasts(can stim labor), do not insert anything into vaginal area(no sex) Do not swim in pools, oceans, hot tubs or jacuzzi, take showers daily, keep perineal area clean and dry, take antibiotics as directed.

RKC Ch 20; ATI Ch 9

1. Discuss each of the following for Gestational Diabetes:

Pathophysiology	Existence of pancreatic beta-cell dysfunction prior to pregnancy and the unmasking of this problem by the development of insulin resistance during pregnancy, which requires enhanced insulin production to maintain normal blood glucose ranges
Nursing Assessment	For the first prenatal visit get a thorough history and physical examination in conjunction with specific laboratory and diagnostic testing aids to develop a plan of care for the women with gestational diabetes
Testing	First prenatal visit (high risk individuals)- fasting HbA1C random Everyone else 24-28 weeks- blood glucose test
Management	The women comes in every 2 weeks up to 28 week and then twice a week until birth to provide the nurse with numerous opportunities for ongoing assessment, education, and counseling
Patient education needs	Dietary restrictions, exercise to keep weight under control, know signs and symptoms of complications

2. What effects can uncontrolled gestational diabetes have on the fetus/newborn?
    - Cord prolapse
    - Congenital anomaly
    - Macrosomia
    - Birth trauma because increased size

- Preterm birth
- Fetal asphyxia
- Intrauterine growth
- Perinatal death
- Respiratory distress syndrome
- Polycythemia
- Hyperbilirubinemia
- Neonatal hypoglycemia
- Subsequent childhood obesity and carbohydrate intolerance

3. What cardiovascular changes are noted during pregnancy?
   Heart rate, cardiac output, blood volume, stroke volume, systemic vascular resistance, oxygen consumption

   a. Why might these put a woman at risk for cardiovascular disease?
      These put a woman at risk for cardiovascular disease because her heart is having to work harder to support her and the baby.

4. Discuss each of the following for iron deficiency anemia.

Pathophysiology	Related to iron deficient diet, GI issues(absorption), short pregnancy interval. Pregnant women often have insufficient iron stores to meet the demands of pregnancy
Nursing Assessment	Review mother's Hx for factors contributing- poor nutrition, hemolysis, pica, multiple gestations, limited intervals between pregnancy, and blood loss. Dietary intake- tea, coffee, chocolate, and high-fiber foods interfere with iron absorption. Ask if pt. Had fatigue, malaise, anorexia, increased susceptibility to infection. Assess skin, mucus membranes for pallor. And VS for Tachycardia
Testing	Low Hgb: < 11, low Hct: < 35%, low iron: <30
Management	Encourage compliance with drug therapy and diet instructions, educate patient on necessity of iron, encourage prenatal vitamins and tke it with a source of vitamin C, dietary counseling for food high in iron
Patient education needs	Dietary education - high iron foods- dried fruits, whole grains, leafy greens, meats. Peanut butter, iron-fortified cereal, take medication with food to reduce GI upset and take with a source of vitamin C, side-effects - dark colored stool and constipation

5. After reading about adolescence and pregnancy, discuss how you as the nurse would care for this patient. What would you do differently?

a. How would you approach topics?
    i. When approaching the topic the nurse should communicate with the patient with understanding and respect in order to create an open connection. Give them age appropriate information. The nurse should not give her opinion but come off in a flexible and sensitive way.

b. Would you focus more on the support people?
    i. It is important to include the support person but they should not be the main focus. In order to make the adolescent feel comfortable they should be the focus and able to make her own decisions.

6. What changes would you incorporate in the nursing care of the advanced maternal age (AMA) woman?

Educate the patient on risk factors and measures to decrease the chance of them happening. Encourage early and regular prenatal care, ensure she knows the benefits of taking Folic acid supplements, she is eating a nutritious diet with enriched grains, fruits and veggies, and drinking 6-8 glasses of water per day. Avoid alcohol and exposure to secondhand smoke,k and do not take any medications unless they are prescribed.

7. Define teratogen.

- Substance known to be toxic to human development

8. Fill in the following table.

Substance	Effects on pregnancy and fetus/newborn
Alcohol	Spontaneous abortion, inadequate wt gain, IUGR, fetal alcohol spectrum disorder, leading cause of intellectual disability
caffeine	Vasoconstricton & mild diuresis in mom, fetal stimulation, but teratogenic effects not documented via research
nicotine	Vasoconstriction, reduced uteroplacnetal blood flow, decreased birth wt, abortion prematureity, abruptio placentae, fetal demise
cocaine	Vasoconstriction, gestational HTN, abruptio placentae , abortion, “snow baby syndrome”, CNS defects, IUGR
marijuana	Anemia, inadequate wt gain, “amotivational syndrome”, hyperactive startle reflex, newborn tremors, prematurity, IUGR
Opiates/narcotics	Maternal & fetal withdrawal, abruptio placentae, preterm labor, premature rupture of membranes, perinatal asphyxia,

	newborn sepsis, and death, intellectual impairment, malnutrition
methamphetamines	CNS depression, newborn withdrawal, maternal seizures in labor, newborn abstinence syndrome, delayed lung maturity

9. List five possible characteristics of Fetal Alcohol Spectrum Disorder.

- Craniofacial dysmorphia
- IUGR
- Microcephaly
- Congenital anomalies → limb abnormalities
- Cardiac defects

RKC Chapter 21

1. Why is the term "failure to progress" often used?

Failure to progress is a term used when cervical dilation is not occuring at the right speed or the fetal head is not descending. This phrase is used to describe dystocia.

2. What factors are associated with an increased risk for dystocia?

- Epidural analgesia
- Excessive analgesia
- Multiple pregnancy
- Hydramnios
- Maternal exhaustion
- Ineffective maternal pushing technique
- Occiput posterior position
- Longer first stage of labor
- Nulliparity
- Short maternal stature→ less than 5 ft
- Fetal birth weight→ greater than 8.8 lbs
- Shoulder dystocia
- Abnormal fetal presentation or position
- Fetal anomalies
- Maternal age greater than 34
- High caffeine consumption
- Overweight
- Ineffective uterine contractions
- High fetal station at complete cervical dilation

3. Familiarize yourself with the common Diagnosis and management of common problems associated with dystocia, their therapeutic management and nursing management i.e.what does this mean for the care delivered by the nurse (p799-804)

- Problems with the Powers Hypertonic uterine dysfunction
    - Therapeutic management:
        - rest w/ sedatives to promote relaxation & stops abnormal activity of the uterus
        - Identification & intervention of contributing factors
        - Ruling out abruptio palcentae
        - Onset of normal labor pattern occurs in many women after 4-6 hr rest period
    - Nursing management
        - Bed rest & sedation to promote relaxation & reduce pain
        - Evaluate fetal tolerance to labor pattern, FHR
        - Infection
        - Hydration
        - Pain management
        - Assist w/ amniotomy
        - Explain dysfunctional pattern
        - Plan for operative birth if normal pattern not achieved
- Hypotonic uterine dysfunction
    - Therapeutic management
        - Identification of possible cause of insufficient uterine action
        - Rupture of amniotic sac if all causes ruled out
        - Possible augmentation w/ oxytocin to stimulate effective uterine contractions
        - C-section if amniotomy & augmentation ineffective
    - Nursing management
        - Admin oxytocin
        - Assist w/ amniotomy
        - Provide continuous electronic fetal monitoring
        - VS, contractions & cervix
        - Infection
        - Dysfunctional pattern
        - Plan for operative birth if normal pattern not achieved
- Precipitate Labor
    - Therapeutic management
        - Vaginal delivery if maternal pelvis is adequate
    - Nursing management
        - Closely monitor woman w/ previous history
        - Anticipate use of scheduled induction to control labor rate
        - Administer pharmacological agents→ tocolytics slow labor)
        - Stay in constant attendance to monitor progress
- Problems w/ the passenger persistent occiput posterior position
    - Therapeutic management
        - Labor to proceed, preparing the woman for a long labor

        - Comfort measures & maternal positioning to help promote fetal head rotation
    - Nursing management
        - % intense back pain in 1st stage of labor
        - Possible use of forceps
        - Assess for prolonged 2nd stage of labor w/ arrest of descent
        - Encourage maternal postion changes
        - Prepare for possible c-section
        - Administer agents for pain relief
        - Apply low back counter pressure
        - Reduce anxiety
        - Reinforce progress
        - Teach about measures to facilitate fetal head rotation
        - Fetopelvic disproportion
        - Explain fetal malpositon
        - Provide close observation for any signs of fetal hypoxia
- Breech Presentation
    - Therapeutic management
        - Optimal method for birth is controversial
        - Breech vaginal births are not recommended & come with higher risk
        - Cesearean birth use of external cephalic version to reduce the chance of breech
    - Nursing management
        - Assess for assoc. Conditions such as placentae previa, hydramnios, fetal anomalies, multifetal pregnancies
        - Ultrasounds to confirm presentation
        - Assist w/ external cephalic version
        - Anticipate trial labor for 4-6 hrs
        - Plan for c-section if no progress is seen or fetal distress occurs
        - Admin RhoGAM to Rh-negative woman to prevent a sensitization reaction
- Shoulder dystocia
    - Therapeutic management
        - Altering key personnel, educating mom and family of steps, empty bladder
        - McRobert's maneuver, suprapubic pressure
        - Combination of maneuvers effective in more than 50% of cases of shoulder dystocia
        - Newborn resuscitation
    - Nursing management
        - Intervene immediately due to cord compression
        - Perform McRoberts maneuver and application of suprapubic pressure
        - Assist w/ positioning mom in squatting position
        - Clear room of unnecessary clutter
- Multiple Pregnancy
    - Therapeutic management
        - Admission to facility w/ specialized care unit
        - Spontaneous progression of labor if mom has no complaints
        - Separate monitoring of each FHR during labor and birth

        - After birth of 1st fetus , clamping of cord and lie of the second twin assessed
        - Cesarean birth if risk factors are high
    - Nursing management
        - Assess for hypotonic labor pattern due to over distension
        - Evaluate for fetal presentation, maternal pelvic size, and gestational age
        - Ensure presence of neonatal team for birth of multiples
        - Anticipate need for cesarean birth, which is common in multifetal pregnancy
- Excessive Fetal size and abnormalities
    - Therapeutic management
        - Schedule cesarean birth if diagnosis is made before the onset of labor to reduce the risk of injury to both the newborn and the mother
    - Nursing management
        - Anticipate need for vacuum and forceps
        - Plan for cesarean birth if maternal parameters are inadequate to give birth to large fetus
- Problems with the passageway
    - Therapeutic management
        - Focus on allowing natural forces of labor contractions to push the largest diameter of the fetal head beyond the obstruction or narrow passage
        - Possible forceps and vacuum extraction to assist navigation through this passageway
    - Nursing management
        - Assess for poor contractions, slow dilation, prolonged labor
        - Evaluate bowel and bladder status to reduce soft tish obstruction and allow increased pelvic space
        - Anticipate trial of labor; if no labor progression after an adequate trial, plan for cesarean birth
- Problems with the psyche
    - Therapeutic management
        - Treatment dependent on woman's responses such as anxiety, fear, anger, frustration, or denial
        - Appropriate medical or surgical interventions depending on the underlying conditions
    - Nursing management
        - Provide comfortable enviroment→ dim light, music
        - Encourage partner to participate
        - Provide pain management
        - Ensure continuous presence of staff to allay anxiety
        - Provide frequent updates concerning fetal status and progress
        - Provide ongoing encouragement
        - Assist in relaxation
        - Engage the woman in conversation about her emotional well-being

4. Define the following:

Hypertonic uterine dysfunction: when the uterus never fully relaxes between contractions

Hypotonic uterine dysfunction: contractions become poor in quality and dont have enough intensity to dilate and efface the cervix during active labor

Uterine Atony: loss of muscle tone in the uterus

Precipitate labor: labor that is over within 3 hours of the start of contractions

5. Why is persistent occiput posterior positioning of the fetus an issue during labor and delivery?

This poses an issue during labor because this positioning has a wider diameter of the head passing through the pelvis of the mother. This slows labor.

6. What risks increase with a persistent breech presentation?

- Fetus (skull) is born last and may become "hung up" or stuck in the pelvis
- The umbilical cord can become compressed between the fetal skull and the maternal pelvis after the fetal chest is born
- Buttocks are soft and not as effective as a cervical dilator during labor
- Trauma to the head as a result of the lack of opportunity for molding

7. What is a shoulder dystocia? What maneuvers are used to attempt a vaginal delivery when a shoulder dystocia is noted? Describe each.

- Shoulder dystocia is when the shoulders of the fetus do not descend during labor after the head of the fetus has already been delivered
- McRobers maneuver→ flex mother's thighs and abduct as much as possible to straighten pelvic curve
- Suprapubic pressure→ light pressure applied above pubic bone. This pushes the fetal anterior should downward to displace it from above the symphysis pubis of the mother.

8. Macrosomia is defined as a newborn who weighs __4,000__ to _4,500__ grams.

9. Why is it important to monitor the bowel and bladder status during labor?

- A full bladder or rectum can slow or prevent the descent of the fetus during labor.

10. What are 3 ways you can empower, inform and advocate for your patient?

- Encourage patients and their partners to participate in decision making about interventions

- Assist patient in expressing fears and anxieties
- Keep patient and partner updated on progress throughout the labor

11. Define preterm labor and list 3 risks that are associated with the infant due to preterm labor/birth.

- Preterm labor is when regular contractions are accompanied by cervical effacement and dilation before the end of the 37th week of gestation
- Risks→ neurodevelopmental disorders, perinatal morbidity, respiratory distress syndrome, infections, congenital heart defects

12. What factors influence the decision to intervene when a woman presents with preterm labor?

- Probability of pregressive labor
- Gestational age
- Risks of treatment

13. When are tocolytics used?

- Tocolytics are used to stop preterm labor by stopping contractions. Tocolytics are most often used when preterm labor occurs before 34 weeks of gestation.

14. Name 5 subtle symptoms of preterm labor.

- Pelvic pressure
- Low, dull backache
- Menstrual-like cramps
- UTI symptoms
- Nausea, vomiting, diarrhea

15. What does a fetal fibronectin test determine?

- Useful marker for impending membrane rupture
- Negative fetal fibronectin test is a strong predictor that preterm labor in the next 2 weeks in unlikely

16. Define prolonged pregnancy.

- Prolonged pregnancy is pregnancy that lasts longer than 42 weeks of gestation. It can cause macrosomia, shoulder dystocia, brachial plexus injuries, low apgar scores, postmaturity syndrome, and cephalopelvic disproportion.

17. What is the difference between labor induction and labor augmentation?

- Induction- to stimulate the uterus to begin labor (Ex amniotomy)

- Augmentation- To make the labor go quicker by using medicine such as oxytocin

18. What is the most common adverse effect of oxytocin?
    - Uterine hyperstumlation → fetal compromise & impaired oxygenation
19. When administering oxytocin what are the primary assessments that need to be made?
    - Monitor maternal and fetal status is essential
    - Monitor the mothers vital signs and FHR during the first stage
    - Evaluate contractions (frequency, duration, intensity, and resting period)
    - Perform vaginal examinations to determine cervical dilation and fetal descent
20. What does VBAC stand for?
    - Vaginal birth after cesarean
21. What would you do if you encounter an umbilical cord prolapse?
    - Call for help immediately and do not leave the woman.
    - When membranes are artificially ruptured, assist with verifying that the presenting part is well applied to the cervix and engaged into the pelvis
    - If pressure or compression of the cord occurs, assist with measures to relieve the compression
    - Monitor FHR, maintain bed rest, and administer oxygen if ordered
    - Prepare the women for an emergency c-section to save the fetus life if cervix is not fully dilated
22. What is a typical sign of uterine rupture?
    - Fetal distress
    - Acute and continuous abdominal pain with or without epidural
    - Vaginal bleeding
    - Hematuria
    - Irregular abdominal contour
    - Loss of station in the fetal presenting part
    - Hypovolemic shock in the women, fetus, or both
23. Why might an amnioinfusion be done?
    - To minimize the risk of meconium aspiration by diluting the meconium in the amniotic fluid expelled by the hypoxic fetus
    -
24. What are the indications for use of forceps or vacuum extractor?
    - Prolonged second stage of labor
    - Distressed FHR pattern
    - Failure of the presenting part to fully rotate and descend in the pelvis

- Limited sensation and inability to push effectively due to the effects of regional anesthesia
- Presumed fetal jeopardy or fetal distress
- Maternal heart disease
- Acute pulmonary edema
- Intrapartum infection
- Maternal fatigue
- infection

25. What are the leading indications for cesarean birth?

- Previous cesarean birth, breech presentation, dystocia, and fetal distress