CASE STUDY - INDUCTION OF LABOR

A G3, P2 patient at 41 weeks gestation is admitted for induction of labor. Assessment data reveals: cervix dilated 2 cm, 40% effaced, -2 station, cervix firm, and membranes intact. The patient's last baby was delivered at 40 weeks and weighed 9 pounds. The physician has ordered Prostaglandin administration the evening before Oxytocin in the morning.

1. What is the indication for induction of labor?

   The intrauterine environment is hostile to the fetus, PROM, PPROM, post term, chorioamnionitis, hypertension, placenta abruption, maternal medical condition worsens due to pregnancy, fetal demise.

2. Why did the physician order prostaglandins the evening before the induction?

   Prostaglandin is a drug that causes cervical ripening which makes the cervix more willing to dilate during labor.

3. What tests or evaluation should be performed prior to the induction?

   Assess FHR for 20 minutes before induction, Leopold's maneuver, vaginal exam, contraction frequency, duration, and strength.

4. What are the nursing considerations when administering an Oxytocin infusion?

   The nurse is in charge of starting, changing, and stopping oxytocin. It is given as a secondary infusion and inserted as close as possible to venipuncture site. It is started slowly and increased gradually. UA, FHR and patterns are monitored before, during administration, and throughout labor.

CASE STUDY - Diabetes in Pregnancy

A 30-year-old, G2, P1, is in her 10th week of pregnancy. Her first baby was stillborn at 32 weeks, so she is very worried about this pregnancy. Initial lab work obtained two weeks ago included testing for diabetes, due to the patient's history a stillborn. The physician explains during the first prenatal visit there is a concern for diabetes due to an elevated glucose level. The nurse realizes patient education regarding diabetes, the effects of diabetes on both the patient and baby and how to manage diabetes it is essential.

1. Discuss maternal risks associated with diabetes and pregnancy.

Hyper or hypoglycemia and ketosis may lead to a higher risk of spontaneous abortion or fetal malformations. Preeclampsia and hypertension. Ketoacidosis if untreated can be fatal to mom and baby. Increased risk for urinary tract infections.

2. Discuss fetal-neonatal risks associated with diabetes and pregnancy.

Congenital malformations, variations in fetal size, hypoglycemia, hypocalcemia, hyperbilirubinemia, respiratory distress syndrome.

3. What educational topics should be covered to assist the patient in managing her diabetes?

Diet recommendations, monitor blood glucose levels, insulin therapy

4. What classification (SGA, AGA, LGA) will this patient's baby most likely be classified as? Discuss your answer.

The baby will most likely be LGA. When mom is hyperglycemic so is baby. Macrosomia is caused by elevated blood glucose and increased production of fetal insulin which acts as a growth hormone.

CASE STUDY - Pregnancy Induced Hypertension

A single 17-year-old patient Gr 1 Pr 0 at 34 weeks gestation comes to the physician's office for her regular prenatal visit. The patient's assessment reveals BP 160/110, DTR's are 3+ with 2 beats clonus, weight gain of 5 pounds, 3+ pitting edema, facial edema, severe headache, blurred vision, and 3 + proteinuria.

Patient's history – single, lives with her parents, attending high school, works at local grocery store in the evenings as a cashier, began prenatal care at 18 weeks, has missed two of her regularly scheduled appointments for prenatal care, never eats breakfast, snacks for lunch and eats dinner after she gets off work at 10:00 pm.

1. What disease process is this patient exhibiting? What in the assessment supports your concern?

   Severe Preeclampsia-the patient's blood pressure is 160/110mand she also has proteinuria, edema, visual disturbances she is also past 20 weeks of gestation.

2. What in the patient's history places her at risk for Pregnancy-Induced Hypertension?

   Not attending her prenatal care appointments regularly, poor nutrition, little rest adolescent.

3. Describe how Pregnancy-Induced Hypertension affects each organ and how these effects are manifested.

   Vasoconstriction and vasospasm can cause multisystem organ failure resulting in thing like congestive heart failure, decreased intravascular volume, pulmonary edema, acute renal failure, impaired drug metabolism and excretion, hemolysis, thrombocytopenia, anemia, procedures, stroke, visual disturbances, coagulation defects, decreased placental profusion.

4. What will the patient's treatment consist of?

   The patient will be admitted to the hospital and be on bed rest with fetal monitoring, receive anti hypertensives and possibly anticonvulsants, blood pressure monitoring, daily weight, urine analysis,

5. What is the drug of choice for this condition? What other medication(s) might be ordered for this patient?

   Anti-hypertensives such as labetalol, hydralazine, nifedipine. she might also receive anticonvulsants such as magnesium sulfate.

6. What are the Nursing considerations when administering the drug of choice? (Side effects & medication administration guidelines)

   Labetalol can cause hypoglycemia and SGA. Hydralazine can cause hypotension headaches and fetal distress. Nifedipine can cause tachycardia and headaches. It is very important to monitor these moms and babies due to increase risk for decrease placental perfusion.