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?

   Before the induction of labor, the healthcare provider will evaluate certain criteria about mom and baby. This can include the moms' overall health and the baby. The major reason for the induction for this patient is because of the baby gestational age. She is reaching post-term in her pregnancy. The second reason is because of moms' history of her last birth. The baby was delivered at 9 pounds. Her assessment data also reveals poor results for a successful vaginal delivery.

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

   The hormone prostaglandin is ordered the evening before the induction because this will allow the cervix to ripen. Prostaglandins cause a reflex of the smooth muscles and produce vasodilation for the delivery. The patient delivered her last baby at 40 weeks and weighed 9 pounds. The mother is 41 weeks' gestation and want to provide the mother and baby a positive birthing experience. This can prevent further delays that may cause harm.

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

   Prior to the induction the physician and nurse will work together to provide test and assessments to see if the induction is not contraindicated. Contraindications can include abnormal fetal position, umbilical prolapse, active genital herpes or diagnoses of HIV. Once this is evaluated the Bishop Score will be performed. This is assessing the status of cervix. If the score is less than six a successful vaginal delivery is not favorable. The patient has a score of three and therefore prostaglandins are administered to the patient.

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

   The nursing considerations when administering an Oxytocin infusion is to preform assessments. This includes the uterine activity and fetal heart rate patterns. This will gather the baseline if tachysystole occurs. When prepping the medication, the Oxytocin needs to be diluted. This can be given as a secondary infusion so it can be stopped quickly if complications arise. Make sure the medication is administered in the most proximal port. An infusion pump will be used. Introduce the medication slowly and gradually to make sure the mother and baby are stabilized. The last nursing consideration that is required is to continuously monitor the fetus if Oxytocin is infusing. If tachysystole, Category II or III, abnormal fetal patterns occur, stop the infusion, and preform nursing actions.

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 of 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.

   A woman that has type one, type two, or gestational diabetes can cause a negative effect on the mother. If the mother decides to get pregnant, she needs to know the risk throughout pregnancy. The major risk is the high blood sugar throughout pregnancy which can result into a cesarean delivery. Asian and black woman have a higher risk.

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

   The fetal-neonatal risk is the mother having high blood sugar around the time of conception. This increases the risk of birth defects, stillbirth, and preterm birth. The baby may be born larger and may develop obesity or type two diabetes in the future.

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

   Before pregnancy the mother should talk to their doctor about managing diabetes to provide a healthy pregnancy. The initial lab work that was obtained determined an elevated blood glucose in her second pregnancy. Since the mother is 10 weeks pregnant provide information about teaching on what to do before, during, and after pregnancy. Since she is pregnant, she will need to monitor her blood sugars regularly, a healthy eating plan that can be developed, be physically active, and take insulin as directed if needed. After pregnancy she will need to be retested 4 to 12 weeks after the baby is born. During the mothers first pregnancy she may not have had prenatal care. Teaching about the importance of having a provider can prevent and manage results. This can include preconception care, review lab work, adjustment of medications, and check for and treat related health problems.

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

   The classification the baby will be most likely classified as an LGA because of the mother being diabetic. When a woman has high blood sugar it can be passed to her baby. In the womb the baby begins to make their own insulin. All the extra sugar and insulin can lead to fast growth and fat deposits. This causes a larger baby.

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?

   The patient is exhibiting Pregnancy Induced Hypertension. In the patient's history it states that the blood pressure 160/110, edema known as swelling, and protein in the urine. These are the three primary characteristics of the disease process. She is also experiencing sudden weight gain, and blurred vision.

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

   The risk for Pregnancy-Induced Hypertension that is in the patient's history is that she started prenatal treatment at 18 weeks. We always want mothers to start prenatal as soon as she knows she is pregnant. The patient is at risk because of her age. She also has missed two of her regular scheduled appointments. This is increasing her risk for future complications because they are not being caught in time. The patient is also not getting enough nutritional needs for herself and the baby.

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

The major issue with Pregnancy-Induced Hypertension is the resistance of the blood vessels. This can hinder blood flow to the kidneys, brain, heart, uterus, and placenta. The placenta starts to reduce in placental profusion. The uterus obtains clots and the kidneys do not filter appropriately due to lack of nutrition and the hindered blood flow. The brain and heart increase in resistance and can lead to a heart attack, stroke, or seizures. This are late signs that cause harm to the mother and baby and may lead to death.

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

The patient treatment will begin by preventing the condition from becoming worse and to prevent it from causing other complications. This can include bed rest at home or in the hospital. The patient will have fetal monitoring and kick counting. We want to perform these as soon as possible to gather a baseline. A non-stress test will be performed and a biophysical profile. Lab work testing of the urine and blood can determine if the condition is getting better or worse. The extensive amount of test and assessments is vital to establish the well-being of mom and baby.

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

The drug of choice will be anti-hypertensive drug. The focus is to correct the hypertension of the patient and prevent complications to the baby. The first drug of choice is Methyldopa. For emergency treatment can include hydralazine, labetalol, and oral nifedipine. Corticosteroids may help mature the lungs of the fetus. Angiotensin-converting enzyme inhibitors are not recommended.

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

When administering this medication make sure the patient does not have liver disease or a history of liver problems. Take the medication even if you are feeling well. High blood pressure tends to have no symptoms and/or may cause you to feel fatigue. Avoid getting up to fast from sitting or lying position you may become dizzy. Patient will have their own therapeutic range to a medication. This medication can be 500 mg to 2 g orally divided into 2 to 4 doses a day, up to a maximum of 3 g a day. If the patient is experiencing a hypertensive emergency, 250 to 500 mg IV can be administrated over 30 to 60 minutes every 6 hours or 4 g a day.