

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?

There are many different reasons why a patient would have to induce their labor. In this case study I believe that she will be induced because she is 41 weeks gestation meaning she is post term. Other indications of induction of labor are as follows: Pregnancy induced hypertension, pre-eclampsia, diabetes, fetal stress, and many more.

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

Prostaglandins are inserted into the cervix and provides manual dilation of the cervix through expansion which is known as cervical ripening.

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

Before the induction the nurse must assess the FHR, maternal temperature, and the fluid color, amount, and odor.

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

When administering Oxytocin, you have to start at a low dose and increase 1-2mu/min every 15-30 minutes until adequate uterine contractions are achieved.

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 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.

Maternal risks associated with diabetes in pregnancy are monilial vaginitis, uti, hyperglycemia, pre-eclampsia, cesarean birth, and hydramnios.

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

There are many fetal neonatal risks with diabetes and pregnancy. One being macrosomia which is a large infant weighing over 4000 grams. Another risk is shoulder dystocia as resulting from resulting from a large gestational age infant. Last one I want to discuss is respiratory distress syndrome which is caused by high insulin levels which inhibit fetal enzymes necessary for surfactant production.

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

Maintenance of blood glucose levels are extremely important in patient teaching. We also should teach how to eat a balance diet and exercise. We also would cover how to check you BS levels and well as when to take their medicine and be compliant. Another teaching we should include is teaching them what could happen to their baby if blood glucose levels are not maintain.

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

The class this patient baby will probably be is LGA because having diabetes while pregnant causes an increase BG levels in the mom that circulates to the baby causing the baby to make extra insulin. With all the extra sugar and insulin production can lead to excessive growth.

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 severe pre-eclampsia because her blood pressure was 160/110, severe headache, facial edema, blurred vision, and 3+ proteinuria.

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

Her age places her at risk for pregnancy induced hypertension.

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

It can affect the immune, cardiac, and renal. They are characterized by placental insufficiency during early pregnancy, vascular dysfunction, and vasospasm.

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

She will be managed in the hospital for mom and baby safety. She will be put on magnesium sulfate.

5. What is the drug of choice for this condition? What other medication(s) might be ordered for this patient? Magnesium sulfate is the drug of choice, but she also might take methyldopa, labetalol, hydralazine, and nifedipine.

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

Some side effects of magnesium sulfate are drowsiness, decreased respirations, bradycardia, and muscle weakness. Some medication administration guidelines are for the initial loading dose, it should be 4-6g over 15-30 minutes followed by a maintenance dose of 2g/hour. The patient should be assessed frequently to identify toxicity levels which is when the serum magnesium level is over 7mEq/L. Signs of toxicity are lethargy, muscle weakness, double vision, and decreases or absent tendon reflexes.