

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?

How big the last baby was, and it looks like she might have lost a baby at sometime since she is a G3 patient. Induction of labor may be medically necessary.

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

Prostaglandin is a drug that will be used to cause cervical ripening.

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

Assess FHR for a least 20 mins before induction, perform Leopold's maneuvers, vaginal examination, or both to verify cephalic fetal presentation.

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

Oxytocin is started slowly and increased gradually. Fetal heart patterns are monitored before induction, when oxytocin is started, and throughout the labor. Monitor for adverse reactions. Observe FHR for patterns, and intervene as needed.

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.

Hypertension, Preeclampsia, ketoacidosis, ketoacidosis can progress to maternal death, overdistention of the uterus by hydramnios or a large fetus, difficult labor, shoulder dystocia, injury to the birth canal or the infant, possible cesarean birth, and risk for postpartum hemorrhage.

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

During the first trimester, when major fetal organs are developing, effects of the abnormal metabolic environment such as in hypoglycemia, hyperglycemia, hyperbilirubinemia, respiratory distress, and ketosis may lead to spontaneous abortion or major fetal malformations, fetal diuresis and premature rupture of membranes, neural tube defects, caudal regression syndrome, and cardiac defects.

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

Establish the optimal time to conceive, Identify whether diabetes complications exist in other organ systems, teach how to use a glucometer for blood glucose level measurement, take daily prenatal vitamin high in folic acid, diet recommendations

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

Due to this patient having a stillborn at 32 weeks, I feel like she would be at risk for having a SGA baby. They would have to monitor her closely to make sure she gets to as close to full term as they can get her to be, before inducing her.

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?

Preeclampsia, >20 weeks gestation, proteinuria, edema,

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

Patient's age, late prenatal care, poor diet,

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

Decreased renal perfusion, reduced renal blood flow resulting in glomerular damage, loss of protein from kidneys reduces colloid osmotic pressure, reduced intravascular volume triggering the retention of both sodium and water, reduce liver circulation impairs function and leads to hepatic edema and subcapsular hemorrhage, which then can lead to hemorrhagic necrosis. Vasoconstriction of cerebral vessels leading to cerebral hemorrhages. Decreased colloid oncotic pressure leading to pulmonary edema. Decreased placental circulation resulting in infarction and the risk for placental abruption and HELLP syndrome.

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

Bed rest and fetal monitoring, antihypertensive medications,

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

Labetalol: less maternal tachycardia and fewer adverse effects.

Hydralazine: higher dose are associated with maternal hypotension, and headaches

Nifedipine: associated with reflex tachycardia and headaches.

Magnesium sulfate to prevent seizures, or phenytoin may be used in case magnesium sulfate is inappropriate.

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

Labetalol- to treat high blood pressure and has less maternal tachycardia.

SE: Sleepy, dizzy, weak, headaches, cold fingers or toes, N/V, diarrhea, stomach pain

Medication administration: tablet taken by mouth. Usually taken two or three times a day.