

## 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?

Mother is 41 weeks, a post term pregnancy.

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

Used to cause cervical ripening since patient is only dilated 2 cm.

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

Cervical assessment, Bishop scoring system

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

Oxytocin is diluted in an isotonic solution

The oxytocin line is inserted into the primary IV line, the proximal port

Oxytocin is started slowly, increased gradually with a pump

UA, FHR, and fetal heart patterns are monitored before induction

## **CASE STUDY - Diabetes in Pregnancy**

A 30-year-old, G2, P1, is in her 10<sup>th</sup> 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.

There is an increased risk for hypertension (preeclampsia), ketoacidosis, UTI, and hydramnios.

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

There is an increased risk for major congenital malformations, cesarean birth, shoulder dystocia, oligohydramnios, hypoglycemia, hypocalcemia, hyperbilirubinemia, and RDS.

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

Educate patient on maintaining a normal blood glucose level before and throughout pregnancy, with self-monitoring. Educate patient on importance of vitamins like folic acid, and a healthy diet.

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

LGA because the mother's excess glucose is transferred to fetus, leading to increase tissue and fat deposits.

## **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 preeclampsia, with assessment finding of edema, increased blood pressure, edema, blurred vision, and proteinuria.

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

Being a young pregnant woman places her at increased risk.

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

CNS- headache, drowsiness, confusion show poor cerebral perfusion and may be lead of seizures.

Visual disturbances- such as blurred or double vision or spots before the eyes

Neuromuscular- Numbness or tingling of the hands or feet occurs when nerves are compressed by retained fluid.

GI- epigastric pain or "upset stomach"

GU- Decreased urinary output indicates poor perfusion of the kidneys and may precede acute renal failure

Liver- Impaired liver function as indicated by abnormally elevated liver enzymes

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

Patient should rest, get daily weights, monitor blood pressure, increased calories, and antihypertensive medications.

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

Labetalol, Hydralazine, Nifedipine

Anticonvulsants may be ordered as well

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

Some hypertensive medications are contraindicated in patients with asthma, heart disease, or CHF.

Monitoring for hypotension and tachycardia.

Caution when giving antihypertensive medications to the woman receiving magnesium sulfate because hypotension may result, reducing placental perfusion