

## **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?

Need for faster delivery: Post term pregnancy

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

Prostaglandins helps with softening and dilation of cervix to prepare for labor

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

Cervical status by assessing bishop score (dilation, effacement, station, consistency, position)

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

Check baseline for Pt and fetal status for 20 minutes to labor, so monitor uterine activity, fetal heart rate, fetal heart rate patterns.

## **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.

Among women with any type of diabetes, high blood sugar throughout pregnancy increases women's risk of having a cesarean delivery due to large size of baby.

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

High blood sugar around the time of conception increases babies' risk of birth defects, stillbirth, and preterm birth and increases babies' risk of being born too large and developing obesity or type 2 diabetes in the future.

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

Losing a few pounds and engaging more in a healthy lifestyle such as increasing activities and choosing healthier food choices are good topics to assist pt in diabetes management.

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 a LGA due to all the high blood sugar that is also shared with the baby in the uterus. The combination of high blood glucose levels from the mother and high insulin levels in the fetus results in large deposits of fat which causes the fetus to grow excessively large.

## **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 with supporting symptoms of high bp of 160/110, edema, headache, blurred vision, proteinuria, and weight gain

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

Being younger than 20-year-old and her first pregnancy

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

In women with preeclampsia, these blood vessels don't seem to develop or function properly. They're narrower than normal blood vessels and react differently to hormonal signaling, which limits the amount of blood that can flow through them.

kidney and liver- proteinuria, high creatine, high AST and ALT

Eyes- retinal damage, blurred vision

Brain-severe headache, clonus, altered mental status

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

Meds, bedrest, hospitalization for monitoring

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

Antihypertensive, methyldopa, is the drug of choice for this condition. Corticosteroids, diuretics, and beta blockers may be ordered for this patient.

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

-Methyldopa common s/e are dizziness, headache, and asthenia. It's serious s/e are heart failure, blood dyscrasias, hepatotoxicity, systemic lupus erythematosus and parkinsonism. Helping the pt with moving around will prevent further injuries, and monitoring CBC, blood pressure, liver fx will help with early detection or prevent complications.

-Oral dose increases should be added to the evening does to initially minimize effects of drowsiness; IV doses should be diluted in 100 mL of D5W, infused over 30 to 60 mins.