

## 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?
  - a. The patient is at 41 weeks gestation and pushing the post term 42 weeks range. At post term the fetus runs the risk of having placental insufficiency and other issues related to being post term. Therefore, Induction of labor is indicated for this patient.
  
2. Why did the physician order prostaglandins the evening before the induction?
  - a. Prostaglandins aid in cervical ripening. This will prepare the cervix for the trials of labor. This will allow for proper effacement and dilation with the onset of induction and the delivery of oxytocin.
  
3. What tests or evaluation should be performed prior to the induction?
  - a. An evaluation that should be performed before labor is a bishops score. A bishops score assess if induction of labor should be utilized and how likely said induction will lead to a vaginal birth.

4. What are the nursing considerations when administering an Oxytocin infusion?
  - a. Understanding how to calculate proper dose, get a FHR baseline before starting and then continuous monitor after starting, watch for tachysystole or abnormal FHR, Be prepared IUR. Stop immediately if tachysystole with Category 2 or 3 FHR.

## 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.
  - a. Risk of high blood sugar during time of pregnancy, increased risk of infection, poor healing of wounds that occur during pregnancy, risk of pre term birth, risk of preeclampsia, higher chance of C-section
  
2. Discuss fetal-neonatal risks associated with diabetes and pregnancy.
  - a. Risk of LGA baby, Risk of preterm delivery, Hypoglycemia upon cutting cord. RDS, Diabetes later on in life, risk of still birth
  
3. What educational topics should be covered to assist the patient in managing her diabetes?
  - a. Teach about Proper nutrition and exercise, If insulin or medication is prescribed teach about proper dosing and usage, teach about how to check and monitor blood sugar, Teach about good blood sugar range, Teach about signs and symptoms of high or low blood sugar.

4. What classification (SGA, AGA, LGA) will this patient's baby most likely be classified as? Discuss your answer.
- a. The baby will likely be classified as LGA. Babies born to diabetic mother are usually very large for gestational age. They also come with other abnormalities such as very red skin upon being born. The LGA status of these babies is why C-sections are a bigger risk for these diabetic pregnancies.

## 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?
  - a. This patient is showing signs of severe preeclampsia. One big sign that the patient is experiencing this is the +3 proteinuria. Trace proteinuria is common during pregnancy, but +2-+3 is a sign of severe preeclampsia. Another sign is the edema, a blood pressure greater than 140/90, and weight gain.
  
2. What in the patient's history places her at risk for Pregnancy-Induced Hypertension?
  - a. She is a teen pregnancy which are at highest risk for Pregnancy-induced hypertension. She has also missed 2 of her prenatal appointments and has a sporadic diet.
  
3. Describe how Pregnancy-Induced Hypertension affects each organ and how these effects are manifested.
  - a. Renal insufficiency shown by edema, weight gain, and proteinuria. Liver insufficiency shown by thrombocytopenia and liver enzyme elevation. The patient will also have CNS issues marked by reflex issues, visual disturbances, and headaches. Along with various other signs and symptoms
  
4. What will the patient's treatment consist of?
  - a. There will be no sodium restriction in diet. If it is severe the patient will be hospitalized and on bed rest. The only cure is delivery of the baby and the placenta. And the baby will have continued FHR monitoring. The patients BP will be checked

regularly and will have regular checks for proteinuria. Will also decrease stimulation and keep in left lateral position.

5. What is the drug of choice for this condition? What other medication(s) might be ordered for this patient?
  - a. The patient will be given antihypertensives and magnesium sulfate to prevent seizures (the drug of choice).
  
6. What are the Nursing considerations when administering the drug of choice? (Side effects & medication administration guidelines)
  - a. With magnesium sulfate you want to watch out for toxicity the signs and symptoms of toxicity is respiratory depression, chest pain, mental confusion, slurred speech, depressed deep tendon reflexes, flushing, sweating, lethargy, hypotension. If toxicity occurs, you want to have resuscitation equipment on hand. When toxicity occurs, you will stop the medication and give calcium gluconate.