

## 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?
  - The mother having a history of delivering a baby that was a little to big than what is preferred. We don't want the mother hurting herself or undergoing any other complication that can be avoided.
2. Why did the physician order prostaglandins the evening before the induction?
  - It helps "ripen the cervix" in which will help aid in the delivery of the baby
3. What tests or evaluation should be performed prior to the induction?
  - BISHOP score
  - EFM
  - Vaginal exam
  - Leopold's maneuver
4. What are the nursing considerations when administering an Oxytocin infusion?
  - The length of contractions
  - Making sure the medicine is going at the right rate
  - EFM

## **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.
  - LGA baby
  - Preeclampsia
  - C-section birth
  
2. Discuss fetal-neonatal risks associated with diabetes and pregnancy.
  - Hyperbilirubinemia
  - Macrosomia
  - LGA
  - Still Birth
  - Birth Defects (glucose tolerance)
  
3. What educational topics should be covered to assist the patient in managing her diabetes?
  - When insulin demands are at their greatest. (During second and third trimesters)
  - The pathophysiology behind glucose exchange between the mother and the baby
  - How to get adequate nutrition during pregnancy with watching out for high sugar foods
  
4. What classification (SGA, AGA, LGA) will this patient's baby most likely be classified as? Discuss your answer. LGA- with glucose being very prominent in the baby, it causes fat to build causing the baby to grow in size faster than usual making the baby LGA.

## **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?
  - Severe preeclampsia since the patient has a blood pressure reading of 160/110 with proteinuria at 3+.
  
2. What in the patient's history places her at risk for Pregnancy-Induced Hypertension?
  - One of the biggest risks is being a teen mom. Not only is she a teen mom, but she also has an unstable diet in which places a huge factor for preeclampsia.
  
3. Describe how Pregnancy-Induced Hypertension affects each organ and how these effects are manifested.
  - It affects the Kidneys (affects filtering quality)
  - Heart ( causes over workload on heart)
  - Placenta ( blood transfusion is less causing delayed filtering of baby)
  - Brain (seizures)
4. What will the patient's treatment consist of?
  - Strict bedrest
  
  - Magnesium sulfate
  
  - Antihypertensives (consult with HCP)

5. What is the drug of choice for this condition? What other medication(s) might be ordered for this patient?
- Magnesium sulfate because it offers neuroprotection of baby. It also helps mom prevent seizures
  - Corticosteroids may be used to help mature fetal lung development and delay pregnancy if needed
6. What are the Nursing considerations when administering the drug of choice? (Side effects & medication administration guidelines)
- Watching for Magnesium Toxicity:
  - s/s : absent deep tendon reflexes, Respirations less than 12, and hypotension
  - medication has to be given via pump, at a correct dosage, and frequent labs will have to be monitored for toxic magnesium levels