# 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 reason the physician is inducing labor is because she is within the range of weeks for a healthy delivery. Based on her previous pregnancy, she has already carried a week longer and she is at risk for having a LGA baby.

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

Prostaglandin has been ordered to help ripen the cervix prior to induction. According to the assessment, the cervix was firm, only dilated 2cm and 40% effaced. This will help safely speed up the process.

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

Before the induction, a type and cross and would be performed to determine if the mom is Rh -, another test should be performed to determine if the membranes have already ruptured and the Leopold's maneuver should be performed to determine the placement of the baby.

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

When administering oxytocin you need to ensure that it is always being ran through a pump and inserted in the port closest to the insertion site. It is also important to monitor the fetal heart rate through a EFM during administration to watch for variability and coinciding behaviors with contractions. You also need to monitor the mom's vital signs during administration for blood pressure changes or arrythmias.

# 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.

There are quite a few risks associated with diabetes during pregnancy such as the mom being at a higher risk for developing type 2 DM after delivery of the baby. With gestational diabetes the mom might experience hyperglycemia or uncontrolled blood glucose levels affecting the health of the baby, this can cause an increased risk of C-section. Gestational diabetes has also been known to put the mom at a higher risk for hypertension and preeclampsia. Ultimately the only treatment for this illness is delivery of the baby and of the placenta.

2. Discuss fetal-neonatal risks associated with diabetes and pregnancy.
One of the many risks associated with gestational diabetes for the baby include being LGA after birth making it more difficult for a vaginal delivery. More often than not, these babies are born via C-section. After birth, these babies have an extremely difficult time trying to regulate their blood sugar levels. Most babies end up needing formula supplements to get the extra calories and sugars that they may need to regulate their blood sugar. Finally, this leads to more traumatic care for the infant due to heel sticks prior to feeding which can end up being every 2-3 hours.

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

It is crucial to educate the patient about a healthy diet and lifestyle especially since she is so early in her pregnancy. Her diet needs to include fresh fruits and vegetables and a good amount of whole grains while

also portion controlling. She needs to be educated on the importance of regular activity and exercise even if it is as small as walking around the block twice a day.

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

More than likely, her baby will end up being LGA. This happens because the baby has an over exposure to higher-than-normal blood sugars leading to macrosomia. Due to this over exposure to the high blood sugars, these babies store that extra sugar as fat causing obesity down the road.

# 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?

   Due to the patient's age, clinical manifestations, and history she is exhibiting behaviors of Pregnancy-Induced Hypertension and Preeclampsia. This is apparent because of her blood pressure, edema, headache, and proteinuria. The signs of Pregnancy-Induced Hypertension include hypertension, and proteinuria. However, the signs and symptoms of Preeclampsia include everything else that the patient is experiencing such as pitting edema, facial edema, headache, and blurred vision.


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

   Since the patient is only 17 she is at a much higher risk for developing this disease due to the lack of social support and stress she may encounter throughout her pregnancy. Her lack of prenatal care and poor diet are also huge risk factors.


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

   Pregnancy-Induced Hypertension tends to have a global effect on the body and can damage each organ individually.

   Heart- the heart is having to pump harder during the pregnancy which can lead to heart failure later in life.

   Kidneys- the kidneys are secreting an abnormal amount of protein which can overtime, damage the ureters and decreased urine output.

   Lungs- this disease can lead to fluid in the lungs causing extreme shortness of breath.

Liver- the liver can become damaged overtime due to elevated liver enzymes and rapid hemolysis.

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

   Unfortunately, the most effective treatment is delivery of the baby and the placenta. However in the meantime, moms can be prescribed antihypertensives, corticosteroids to help prolong the pregnancy and mature the baby's lungs quicker, and finally bedrest is imperative. In some cases, hospitalization may be necessary to monitor maternal blood pressures and FHR.

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

   The drug of choice for this condition includes antihypertensives. Other medications may include anticonvulsants, corticosteroids, and possibly anticoagulants.

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

   Nursing considerations include monitoring for hypotension, the seven rights of medication administration, and careful monitoring of the FHR.