

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 patient is already 41 weeks gestation. The patient's previous baby was 9 pounds at 40 weeks. There is a possibility this baby will also be 9 pounds or more.

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

Giving the hormone prostaglandin to help ripen the cervix. It helps soften and thin out the cervix.

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

Evaluations that may be done are evaluating the mother's health and status of the cervix. They also include the baby's health, gestational age, weight, size, and position in the uterus

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

Avoid excessive stimulation to the uterus or harm to the fetus, FHR monitoring, and uterine activity.

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.
 - Infections, preeclampsia, hydramnios, ketoacidosis, hypoglycemia, and hyperglycemia
2. Discuss fetal-neonatal risks associated with diabetes and pregnancy.
 - Fetal death, macrosomia- LGA, respiratory distress syndrome, hyperbilirubinemia, hypoglycemia, prematurity, cardiomyopathy or cardiac anomaly, congenital defects, psychiatric disorder.
3. What educational topics should be covered to assist the patient in managing her diabetes?
 - Insulin requirements are altered during pregnancy and labor.
 - What to eat
 - Regulating blood sugar
4. What classification (SGA, AGA, LGA) will this patient's baby most likely be classified as? Discuss your answer.
 - LGA – extra blood glucose goes through the placenta giving the baby high blood glucose levels. The baby's pancreas makes extra insulin to get rid of the extra blood glucose. The extra energy is stored as fat.

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
 - BP 160/110, DTR 3+, 3+ pitting edema, severe headache, blurred vision, 3+ protein
2. What in the patient's history places her at risk for Pregnancy-Induced Hypertension?
 - Began prenatal care at 18 weeks, misses breakfast, only snacks for lunch, eats a late dinner, isn't showing to her prenatal appointments.
3. Describe how Pregnancy-Induced Hypertension affects each organ and how these effects are manifested.
 - CNS symptoms – severe headache and visual disturbances can lead to grand mal seizures
 - Extensive peripheral edema; pulmonary edema and cyanosis, impaired liver function, thrombocytopenia, elevated serum creatinine,
 - HELLP syndrome: hemolysis, elevated liver enzymes, low platelets. Hepatic rupture, renal failure, preterm birth can lead to fetal and maternal death
4. What will the patient's treatment consist of?
 - Do not restrict salt or fluids in diet
 - Only cure is delivery of baby and placenta
 - Home care
 - o Reduce activity, home blood pressure monitoring, follow up with provider, kick counts, weigh daily, test urine for protein, report CNS symptoms, hepatic symptoms, renal signs and fetal distress signs
 - Intrapartum care:
 - o Large bore IV, urine protein every hour, hourly I&O, DTR q hr, BP q 15 to 30

5. What is the drug of choice for this condition? What other medication(s) might be ordered for this patient?
 - Magnesium sulfate - prevent seizures
 - Antihypertensive medications – hydralazine hydrochloride, labetalol, nifedipine, methyldopa
6. What are the Nursing considerations when administering the drug of choice? (Side effects & medication administration guidelines)
 - Always deliver via pump: piggyback into mainline IV infusion to most proximal port
 - Has a loading dose
 - Watch for signs of magnesium toxicity
 - Have calcium gluconate readily available