

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 41 weeks gestation. At 42 weeks there can be signs of a decrease of placental function.

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

Prostaglandins help with cervical ripening. This helps the cervix soften and dilate for preparation of the birth of the baby.

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

Continuous EFM because the prostaglandins can cause tachysystole. An ultrasound and Leopold's maneuver to determine the position of the baby.

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

Given as a secondary if abrupt stop is needed, given through a pump, given through the most proximal port, baseline of fetus is monitored before administration and then monitored throughout administration.

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, hypoglycemia, hyperglycemia, preeclampsia, hydramnios, ketoacidosis, macrosomia, postpartum hemorrhage, hypertension, urinary tract infections, labor dystocia, and birth injuries.

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

NTDs, fetal death, macrosomia, IUGR, RDS, hyperbilirubinemia, hypoglycemia, prematurity, cardiomyopathy/cardia anomaly, hypocalcemia, and caudal regression syndrome.

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

Individualized diet, self- monitoring blood glucose, insulin therapy, kick counts.

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

LGA and AGA. LGA because of hyperglycemia. SGA because of impaired placental perfusion that decreases the supplies of glucose and oxygen.

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?

The patient is exhibiting symptoms of severe preeclampsia. She presents with a bp of 160/110, DTR's 3+, 2 clonus, edema, proteinuria 3+.

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

Adolescent, 1st pregnancy.

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

Vascular bed- endothelial dysfunction, altered coagulation, altered response to vasoactive substances

Cardio/pulmonary- increased vascular resistance, increased cardiac output, decreased colloid osmotic pressure

Renal- proteinuria, altered function

Hepatic- dysfunction, rupture, epigastric pain

Hematologic- thrombocytopenia, altered plt. Function, hemolysis

CNS- hyperreflexia, headaches, seizures

Fetal- intolerance to labor, preterm, oligohydramnios, IUGR, IUFD, placental abruption, uteroplacental- spiral arteries, changes consistent with hypoxia

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

Activity restrictions, BP monitoring, Daily weights, urinalysis, fetal monitoring, antepartum management, and antihypertensive medications.
Delivery of baby if needed.

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

Magnesium sulfate to prevent seizures, antihypertensives: labetalol, hydralazine, and nifedipine.
Steroids to help with fetal lung maturity.

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

IV administration- give a loading dose and then continuous infusion by pump. May cause arrhythmias, bradycardia, hypotension, or respiratory depression. Have resuscitation equipment on hand. Antidote= calcium gluconate. Monitor closely for signs and symptoms of toxicity.