

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 indication for induction for this patient is that she is 41 weeks gestation, so the patient is post term.

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

The physician ordered prostaglandins the evening before the induction to help with "cervical ripening". This softens the cervix and helps it dilate more easily to forces of labor. It is also recommended for a Bishop score of 4 or less.

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

The tests or evaluation that should be performed prior to the induction is a Bishop scale.

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

-Given IVPB, to stop quickly if complications develop

- Connected to the most proximal point to the venipuncture site

-UA, FHR, and Fetal heart rate patterns are monitored for baseline, when the medication is started, and throughout labor

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.

Maternal risk factors associated with diabetes and pregnancy are:

- Hypertension
- Preeclampsia
- Urinary tract infections
- Ketoacidosis

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

- Congenital anomalies
- Macrosomia
- Intrauterine fetal growth restrictions
- Preterm labor, premature rupture of membranes
- Hypoglycemia
- Polycythemia
- Hyperbilirubinemia
- Hypocalcemia
- RDS

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

- Diet recommendations
- Self glucose monitoring
- Exercise
- Properly managing blood glucose
- Plan pregnancy when blood glucose is stabilized

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

LGA

- Hyperglycemia in mom can cause larger babies
- Usually, 9lbs or bigger
- The mother's excessive glucose is transferred during pregnancy

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?

-Preeclampsia

-HTN, Occurs after 20 weeks, Proteinuria

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

She is at risk because this is her first pregnancy.

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

-Cardiovascular: decreased intravascular volume, severe hypertension

-Pulmonary: Pulmonary edema, hypoxemia

-Renal: Oliguria, acute renal failure, impaired drug metabolism

-Hematologic: hemolysis, decreased O₂ capacity, thrombocytopenia, coagulation defects

-Neurologic: seizures, cerebral edema, stroke

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

-Activity restriction, monitor blood pressure, monitor for s/s of severe preeclampsia

-monitor medications

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

Magnesium Sulfate

Antihypertensives: labetalol, hydralazine, nifedipine

Phenytoin, Dilantin

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

-Two nurses must double check the orders and pump settings

-S/S of toxicity: respiratory depression

-Frequent assessment of serum magnesium levels