

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?

Elective, the patient is at 41 weeks gestation. This is the wanted time of labor.

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

Prostaglandins help to promote cervical ripening.

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

Prior to the induction, fetal heart monitoring, and the bishop score should be performed.

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

Assess FHR for at least 20 min prior to induction, perform Leopold's maneuvers and a vaginal exam. Observe UA.

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.

Increased incidence of spontaneous abortion, major fetal malformations. Hypertension and preeclampsia are more likely to occur. UTIs, hydramnios, and shoulder dystocia are likely to occur.

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

Respiratory distress syndrome could occur. Neural tube defects, macrosomia, hyperbilirubinemia, and hypocalcemia could also occur.

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

Glycemic control, nutrition/diet, preconception care, exercise, and insulin therapy.

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

LGA, this is because macrosomia occurs when elevated levels of blood glucose stimulate excessive production of fetal insulin, which acts as a powerful growth hormone.

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. Evidence: 3+ proteinuria, \geq 160/110, severe headache.

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

First pregnancy, late prenatal care, and improper nutrition.

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

Vasoconstriction and impeded blood flow results to a decreased circulation to all body organs.

Reduced GFR

Protein leakage

Reduced liver circulation which leads to hepatic edema and subcapsular hemorrhage.

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

Therapeutic treatment, this is because the only cure is the delivery of the baby. Treatment will be bed rest and FHR monitoring. Antihypertensive medications (labetalol). Anticonvulsant medications (magnesium sulfate).

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

The drugs of choice may be Labetalol. And the other medications would be hydralazine and nifedipine. As well as magnesium sulfate.

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

Labetalol – has less maternal tachycardia and fewer adverse effects. But is contraindicated in patients with asthma, heart disease, CHF. This drug is associated with hypoglycemia and SGA infants.