

CASE STUDY - INDUCTION OF LABOR

LINDSEY LAMBERT

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?

Post term pregnancy is the main indication of labor. Since her last baby was delivered right at term weighing 9lbs (which is large), we would not want her to carry much longer and risk an even bigger neonate which would be difficult to deliver.

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

Prostaglandins assist in the ripening of the cervix in preparation for delivery. Cervical ripening means the cervix will soften and thin out.

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

Assess prenatal record for confirmation of gestational age, any contraindications, and if preliminary tests (NST/BPP) were abnormal. The nurse should check to see if membranes have ruptured and note the stage of labor the patient is in by a sterile vaginal exam. FHR monitor should be applied to monitor baseline vitals before induction.

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

Continuous fetal monitoring, FHR assessed and interpreted q30 low risk/ q15 high risk, during second stage increase monitoring, uterine contraction documentation should include frequency, duration, and strength of contractions (tachysystole= dc or decrease), IUR if FHR indicates, assess pain/vitals/I&O, assess color of amniotic fluid & bloody show.

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 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.

Hydramnios, preeclampsia/eclampsia, hyperglycemia, vaginitis, UTI

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

Macrosomia, shoulder dystocia, hypoglycemia, congenital anomalies, respiratory distress syndrome, polycythemia, IUGR,

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

This can be controlled with lifestyle management. Normal weight women avg caloric intake is 30kcal/kg/day. Overweight is recommended to consume 25kcal/kg/day. Women should be advised to distribute carbohydrates evenly throughout the day. Bedtime snack is important to prevent nighttime hypoglycemia. Exercise is recommended.

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

LGA- large for gestational age due to all the nutrients the fetus receives comes directly from the mother's blood. If maternal blood contains large amounts of glucose, the fetus's pancreas senses that and produces more insulin in attempt to use the excess glucose. The fetus converts the extra glucose to 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 pre-eclampsia- indicated by elevated BP, proteinuria, 3+ edema, DTR with clonus.

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

Being an adolescent and primiparity.

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

Immune, cardiac, and renal systems affected. Placental insufficiency early in pregnancy, vascular dysfunction, and vasospasms.

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

At home- make sure patient understands when to call doctor (increase in BP, visual changes, epigastric pain, N/V, bleeding gums, headache, increased edema, decreased output and fetal movement). Weight taken daily to monitor edema- 3lb gain in 1 one or 4lb over 3 days, must call doctor.

Severe- in hospital for maternal and fetal monitoring- mag sulfate

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

Magnesium sulfate, Hydralazine Methyldopa, Labetalol, Nifedipine

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

S/E- drowsiness, decreased respiration, bradycardia, hypotension, diarrhea, muscle weakness, flushing, sweating, hypothermia.

Admin- IV as secondary infusion always on a pump, loading dose 4-6g over 15-30min then maintain dose of 2g/hr. Monitor for s/s of toxicity (lethargy, absence of DTR, weakness, seizure protocol)