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?**

She has a history of large babies and the further passed the due date she goes, the larger the baby will potentially be. Also, the further she goes passed her due date the higher the chances of intrauterine fetal demise.

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

In attempt to soften the cervix to increase success of vaginal delivery.

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

Bishop score – cervical readiness for delivery. Maternal health, fetal health.

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

Monitor FHR, maternal blood pressure, monitor for tachysystole, refrain from prolonged exposure to prevent desensitizing oxytocin receptor sites.

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.**

Infection, preeclampsia, hydramnios, ketoacidosis, hypoglycemia, hyperglycemia

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

Fetal death, macrosomia-LGA, IUGR (if mom has T1), respiratory distress syndrome, hyperbilirubinemia, hypoglycemia, prematurity, cardiomyopathy or cardiac anomaly, congenital defects

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

Frequency and importance of checking blood glucose, keep a glucose, diet, insulin and activity log, importance of diet, expected plan for labor and delivery,

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

LGA generally due to excessive sugars and such crossing the placenta. Unless mom is type 1 diabetic with vascular changes then SGA.

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?**

S/S of preeclampsia – B/P of 160-110, edema with +3 pitting, facial edema, severe headache, blurred vision, 3+ proteinuria, and abnormal DTRs

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

Young maternal age, irregular diet, inconsistent prenatal care.

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

Vasospasm which leads to poor tissue perfusion which if prolonged then leads to tissue death. Most often leads to kidney failure, hepatic rupture (increased liver enzymes)

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

Management of high B/P, bed rest, follow up with provider q3-4days, kick counts daily

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

Magnesium sulfate as a CNS depressant, prevents and controls seizure activity, prevents contractions since she is preterm, and protects the baby from ventricular hemorrhage

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

IV loading dose 4-6g over 15-20min, continuous infusion to maintain control is 1-2g/hr. ALWAYS administer via pump, piggyback to primary fluids. Keep calcium gluconate near as the antidote. Monitor for respiratory difficulty/depression, chest pain, mental confusion, slurred speech, depressed DTRs, flushing, sweating, lethargy and hypotension. Also monitor I&O, if less than 30ml/hr stop the mag.