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 is post term pregnancy (mother is at 41 wks gestation)

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

Prostaglandin is used to induce cervical ripening. This is where the cervix is softened which makes it more likely to dilate.

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

Evaluation of gestational age and a cervical exam must be done before induction. Also, the FRH needs to be monitored.

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

Mom and baby need to be continually observed for complications. If complications are present, the nurse needs to intervene. The nurse is also in charge of starting and stopping oxytocin infusion based on the hospitals protocol.

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.

Risks that are associated with maternal diabetes include: HTN, pre-eclampsia, UTI, ketoacidosis, cesarean birth, uterine atony with postpartum hemorrhage, and birth injury to maternal tissues.

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

Fetal neonatal risks that are associated with diabetes and pregnancy include: congenital anomalies, perinatal death, intrauterine fetal growth restriction, hypocalcemia, respiratory distress syndrome, preterm labor or preterm rupture of membranes, or perinatal death.

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

The nurse should education the patient about ways to maintain her diabetes by teaching about preconception care, diet, monitoring blood glucose levels, and insulin administration.

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

The baby will most likely be LGA. The mother's glucose crosses the placental barrier, but her insulin does not. The fetus will start producing its own insulin at 10 weeks gestation, but it is not sufficient for the high levels of glucose from the mother.

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 pre-eclampsia. the assessment findings that support this include blood pressure of 160/110, 3+ proteinuria, severe headache, pitting edema, and blurred vision.

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

The mom does not eat a balanced diet, she skips meals and does not eat appropriate foods to maintain a healthy pregnancy. She has also missed two of her prenatal care appointments and she started her prenatal care late.

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

Brain: seizures, cerebral edema, stroke
        Manifested in hyperreflexia, increased ICP, and alteration of cerebral autoregulation.

Heart: hypertension which can lead to hypertensive crisis; congestive heart failure.
        Manifested in increased vascular resistance and increased cardiac output and stroke volume.

Lungs: pulmonary edema.
        Manifested in difficulty breathing and shortness of breath.

Kidneys: acute kidney failure
        Manifested in proteinuria and altered renal function.

Liver: Hepatic rupture, coagulation defects
        Manifested in increased hepatic artery resistance and hepatocellular necrosis.

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

Delivery would be the safest treatment plan for the mom and the baby because the baby is at 34 weeks gestation.

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

Magnesium sulfate is the drug of choice for preeclampsia. Labetalol and hydralazine may also be used.

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

The nurse would need to monitor the mother's respiratory status as well and fluid and electrolytes. Its also important to watch for a sudden decrease in blood pressure.