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 combination of effacement and length of gestation indicates induction is most likely needed. Her previous large infant may be an indicator of future.

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

   Prostaglandins are effective in helping the cervix ripen and expediate labor. It will help the Bishop score improve.

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

   FHR, Contractions, Bishop Score, Biophysical Profile, NST, Contraction Test, Leopold's maneuver, ultrasound and labs.

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

   Monitor the FHR continuously and assess for signs of pain, HTN, abnormal fetal presentation. Postpartum- Need to monitor for uterine activity, and ensure the uterus is firm and not distended. Observe for cramping, bleeding and clots.

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.

There are risks for hypertension, preeclampsia, UTI's, ketoacidosis in mother and fetus, cesarian birth and uterine atony.

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

Congenital disorders, perinatal death, macrosomia, Intrauterine fetal growth restriction, pre-term labor, birth injury, preterm membrane rupture, hyperbilirubinemia, respiratory distress syndrome are possible outcomes for neonates due to diabetes.

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

The patient should discuss with her PCP before she becomes pregnant so that she knows what type or preconception care is needed. She also needs to have a plan for her diets and what kind of nutritional needs she should expect throughout her pregnancy. If she does not know how to self-monitor she should be taught. Taught what her insulin needs are and how to administer insulin as needed.

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

I think the baby will be LGA because with diabetes there will be more insulin produced acting as a growth hormone and causes the baby to grow more than normal.

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 S/S of preeclampsia, Her B/P is 160/110 her double vision, severe headaches, double vision, and all of the edema all point to preeclampsia.

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

The patient was late getting prenatal care, and has also missed appts. She is also not eating breakfast and getting enough food, and also eating way late. It is also her first pregnancy.

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

Cardiovascular- decreased volume, severe HTN, pulmonary edema, CHF.- caused by chronic HTN and reduces the hearts function.

Pulmonary-pulmonary edema, hypoxemia- can reduce the oxygen capacity of mother and fetus.

Renal- oliguria and acute renal failure- this can have systemic effects on the mother and the mother baby. Anemia and reduced O2 capacity also present.

Neurologic- seizures, edema, stroke, and cerebral hemorrhage.

The placenta is also affected- because it may cause abruption and there is reduced O2 to the placenta.

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

Treatment will consist of home care such as activity restrictions, BP monitoring, weight monitoring, and UA's. for more severe cases, bed rest and antihypertensives. Bed rest and fetal monitoring is a must.

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

Magnesium Sulfate- phenytoin, diazepam,

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

Sweating, flushing, hypotension, CNS depression, and resp. Depression. Contraindicated in pts with heart damage, renal insufficiency, and myasthenia graves. Avoid for using more than 5-7 days if in preterm labor.