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 mother is multigravida, the previous baby was a large baby delivered at 40 weeks

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

   To prepare uterus for oxytocin stimulation

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

   The BISHOP score.

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

   Dilute in isotonic solution and given as a secondary infusion so can be stopped quickly if complications arise, the line is inserted into the primary or maintenance IV line as close as possible to venipuncture site (most proximal port), start slowly and titrate gradually and always administered via infusion pump, before induction, uterine activity, fetal heart rate patterns are monitored for normal baseline and variability x 20 min, when oxytocin is infusing, continuous fetal monitoring is required

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.

   Women who are diabetic are more likely to hypertension, preeclampsia, macrosomia, premature births and Cesarean births.

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

   Preterm birth, macrosomia, breathing problems, type two diabetes later in life, hypoglycemia, stillbirth

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

   Routine screening, lifestyle changes, nutrition, physical activity, glucose monitoring, monitoring of fetus, and medications if necessary.

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

   LGA (Large for Gestational Age). When the mother is pregnant the high blood sugar along with the insulin pass to the fetus. All the extra sugar and the extra insulin that is made can lead to fast growth and deposits of 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?

   Hypertension supported by the high BP, the DTR or 3+, the severe headache, blurred vision, and 3 + proteinuria.

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

   Being a teenager.

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

   When blood pressure is high, it can damage artery and blood vessel walls over time. This leads to dangerous complications and even death if left untreated. Damage starts as small tears. As these artery wall tears begin to form, bad cholesterol flowing through the blood starts to attach itself to the tears. More and more cholesterol builds up in the walls, making the artery narrow. Less blood is able to get through. When the proper amount of blood can't move through a blocked artery, it causes damage to the tissue or organ it's supposed to reach. In the heart, this can mean chest pain, irregular heartbeat, or a heart attack. As the kidneys get damaged, large molecules start to sip out like protein and they appear in the urine.

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

   The overall goal is to prevent cerebrovascular and cardiac complications in the mother while preventing toxicity of the fetus. An arrange of medications could be used depending on different factors.

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

   Intravenous hydralazine, immediate release nifedipine, and intravenous labetalol remain the drugs of choice for severe hypertension. Oral extended release nifedipine, oral labetalol, and Methyldopa (most common) are the generally accepted first-line agents for non-severe hypertension. Beta-blockers and diuretics are acceptable, while RAAS inhibitors remain contraindicated.

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

   The side effects of Methyldopa are myocarditis, bradycardia, hepatitis. Nurse must concider the hepatic function prior to administration