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?
    - Baby is post-term (41 weeks)
    - Hostile intrauterine environment
    - SROM w/o onset of labor
    - Chorioamnionitis
    - HTN associated with pregnancy.
    - Worsening maternal conditions.

2. Why did the physician order prostaglandins the evening before the induction?
    - Cervical ripening and induction of labor.

3. What tests or evaluation should be performed prior to the induction?
    - Monitor FHR and uterine contractions (tachysystole)

4. What are the nursing considerations when administering an Oxytocin infusion?
    - Placenta Previa
    - Vasa Previa
    - Umbilical Cord Prolapse
    - Abnormal Fetal Presentation
    - Cephalopelvic Disproportion

- Previous Surgery in the upper uterus.

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.
   - HTN
   - UTIs
   - Ketoacidosis
   - Labor Dystocia
   - Birth injury to maternal tissues

2. Discuss fetal-neonatal risks associated with diabetes and pregnancy.
   - Congenital Abnormalities
   - Perinatal Death
   - Macrosomia
   - IUGR
   - Preterm Labor, PROM
   - Birth injuries
   - Hypoglycemia
   - Polycythemia
   - Hyperbilirubinemia
   - Hypocalcemia
   - RDS

3. What educational topics should be covered to assist the patient in managing her diabetes?
   - Diet
   - Exercise
   - Blood Glucose Monitoring
   - Fetal Surveillance

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

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 Preeclampsia. 160/110 BP, DTR's 3+ with clonus, weight gain, 3+ pitting edema, facial edema, HA, 3+ proteinuria.

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

    - 17 years old, first pregnancy, late prenatal care, missed appointments, bad diet/eating habits, attends HS and works.

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

    - Decreased renal perfusion, BUN, Creat., and uric acid levels rise.

    - Reduced renal blood flow

    - Loss of protein from the kidneys reduces colloid osmotic pressure and allows fluid to shift to interstitial spaces

    - Reduced liver circulation

    - Vasoconstriction of cerebral vessels

    - Decreased placental circulation.

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

    - Antepartum management, bed rest, antihypertensive medications, anticonvulsant medications.

5. What is the drug of choice for this condition? What other medication(s) might be ordered for this patient?
    - Magnesium Sulfate. Calcium-Antidote for toxicity
6. What are the Nursing considerations when administering the drug of choice? (Side effects & medication administration guidelines)

    - Monitor signs and symptoms of Magnesium toxicity- Decreased/absent DTR’s, sweating, flushing, respirations less than 12, hypotension, altered LOC.