



Hypertensive Disorder in Pregnancy - Preeclampsia

Simulated Clinical Experience (SCE™) Overview

Location: Special Care Maternal Unit

History/Information:

This patient is a 35-year-old female, currently 36-weeks pregnant with her first child. She has been monitored by her healthcare provider for the past two weeks because of gradually increasing blood pressure and swelling in her feet and fingers. Today she presented at the healthcare provider's office feeling lethargic and more irritable than usual. She also stated she was not urinating as frequently as usual and her legs and hands had increased swelling. She couldn't get her wedding ring on this morning. On examination her BP was 147/93 (baseline 106/75), RR 18, HR 85, and Temp 36.2°C. Her UA showed 2+ proteinuria on dipstick. She was admitted to the Labor and Delivery Unit or Antepartum Unit for observation and bedrest. On admission the fetal L/S ratio was 1.8 and Phosphatidylglycerol (PG) was 2.0.

Healthcare Provider's Orders:

Vital signs hourly, BP every 30 minutes

Intake and Output hourly

Daily labs: Liver enzymes (lactic dehydrogenase [LDH], aspartate aminotransferase [AST], alanine transaminase [ALT]), chemistry panel (BUN, creatinine, glucose, uric acid), CBC (with platelets)

UA – clean catch or cath specimen

Check deep tendon reflexes hourly

Notify healthcare provider if urine output less than 30mL/hour, deep tendon reflexes 4+ or absent, RR less than 12, BP greater than 150/100

Lateral position, left side lateral position preferred

IV LR 100mL/hour

Learning Objectives

1. Discusses the etiologic factors and implications for patient teaching for hypertensive disorders in pregnancy (gestational hypertension, preeclampsia, eclampsia and chronic hypertension) (COMPREHENSION).
2. Formulates a nursing care plan for a patient with hypertensive disorders in pregnancy (gestation hypertension and preeclampsia) (SYNTHESIS).
3. Demonstrates the nursing management of a magnesium sulfate infusion and oxytocin infusion (APPLICATION).
4. Demonstrates IV administration of magnesium sulfate, labetalol and oxytocin (APPLICATION).
5. Evaluates the effectiveness of interventions for hypertensive disorders in pregnancy (gestation hypertension and preeclampsia) and revises the nursing care plan as indicated (EVALUATION).

Questions to Prepare for the Simulated Clinical Experience

1. What are the major differences between gestational hypertension, preeclampsia and eclampsia? What is the pathophysiology that leads to these conditions?
2. What is HELLP syndrome, and how does it differ?
3. What are the common medications used to treat preeclampsia, and what risks do they carry? What is the nursing management for each?
4. What assessments need to be frequently conducted for the patient with preeclampsia?
5. Describe deep tendon reflexes and how they are graded.
6. Discuss why a patient with preeclampsia is at risk for seizures. What are seizure precautions, and how are they instituted?
7. What are signs of magnesium toxicity in mother and baby?
8. What are the risks to the mother and fetus in states of hypertension or magnesium sulfate toxicity? What is the definitive treatment and why?
9. Identify the common lab tests indicated for the patient with preeclampsia and discuss the cause of abnormal findings. In addition, describe L/S ratio and Phosphatidylglycerol and identify why these tests are important prior to delivery of the baby.

References

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