



# Pregnancy Induced Hypertension

## Simulated Clinical Experience (SCE™) Overview

**Location:** Special Care Maternal Unit

**History/Information:**

The 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 that her legs and hands had increased swelling. She couldn't get her wedding ring on this morning. Upon 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 Special Care Maternal Unit for observation and bedrest. Upon 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 Hct, Liver Enzyme Testing (SGOT, SGPT, and LDH), Uric Acid, and BUN  
Platelet count every day  
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 pregnancy-induced hypertension (APPLICATION).
2. Formulates a nursing care plan for a patient with pregnancy-induced hypertension (APPLICATION).
3. Discusses and 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 pregnancy-induced hypertension and revises the nursing care plan as indicated (ANALYSIS).

## Questions to Prepare for the Simulated Clinical Experience

1. What are the major differences between mild preeclampsia, severe 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 pregnancy-induced hypertension 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 pregnancy-induced hypertension?
5. Describe deep tendon reflexes and how they are graded.
6. Discuss why a patient with pregnancy-induced hypertension 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 risk to the mother and fetus in these conditions? What is the definitive treatment and why?
9. Identify the common lab tests indicated for the patient with pregnancy-induced hypertension 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

- Bridges, E. J., Womble, S., Wallace, M., and McCartney, J. (2003). Hemodynamic monitoring in high-risk obstetrics patients: Pregnancy-induced hypertension and preeclampsia. *Critical Care Nurse*. 23(5), 52-57.
- Brooks, M. B. (2005). Pregnancy, Preeclampsia. Retrieved February 12, 2005 from e-medicine at <http://www.emedicine.com/emerg/topic480.htm>
- Joanna Briggs Institute for Evidence Based Nursing and Midwifery. (2005). *Best practice: Vital signs*, 3(3). Retrieved May 30, 2005 from [http://www.joannabriggs.edu.au/best\\_practice/bp8.php](http://www.joannabriggs.edu.au/best_practice/bp8.php)
- Lowdermilk, D. L. and Perry, S. E. (2007). *Maternity nursing* (7th ed.). St. Louis: Mosby.
- McGee, S. (2007). *Evidence-based physical diagnosis* (2nd ed.). Philadelphia: Saunders.
- Noor, S., Halimi, M., Faiz, N. R., Gull, F., and Akbar, N. (2004). Magnesium sulfate in the prophylaxis and treatment of eclampsia. *Journal of Ayub Medical College*, 16(2), 50-54.
- Poole, J. (2004). Hypertensive disorders in pregnancy. In D. L. Lowdermilk and S. E. Perry (Eds.), *Maternity and Women's Health Care* (837-859). St. Louis: Mosby.
- Springhouse. (2007). *Best practices: A guide to excellence in nursing care* (2nd ed.). Philadelphia: Lippincott.