

C-23 Patient With Preeclampsia and Suspected HELLP Syndrome Refuses General Anesthesia for Cesarean Delivery: Is Neuraxial Acceptable?

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Objective

After completion of this session, the participant will be able to:

- Discuss the utility of point-of-care ultrasound to evaluate fluid status in preeclampsia with severe features.

Case Stem Question

A 37 year old G2P1 at 37 weeks' gestation presents to the Labor and Delivery unit with elevated BP (168/94 mm Hg), new-onset severe headache, and mild RUQ pain consistent with preeclampsia with severe features. She receives a magnesium sulfate loading dose, in addition to escalating doses of antihypertensive agents. Several hours later, the OB team calls an urgent cesarean delivery due to refractory elevated BP despite 4 doses of intravenous labetalol and 4 doses of intravenous hydralazine. The patient has been fluid restricted at 75 mL/hr since arrival. Relevant lab work from 3 hours ago include platelet count 70,000, Hb 9.8, and "mildly" elevated AST and ALT. On physical exam the patient is obese (BMI 50) and has a MP class 4 airway. The patient states she wants to be awake for the surgery and requests a neuraxial anesthetic.

Guiding Questions for Discussion

- 1) Does this patient have HELLP syndrome?
- 2) Are you concerned that the patient has been fluid restricted and has received several doses of antihypertensive agents, in addition to a magnesium sulfate load?
- 3) If you were called by the OB team to help control the patient's blood pressure prior to proceeding to cesarean delivery, which agents might you consider? What is your goal for her blood pressure management?
- 4) What are the diagnostic criteria for preeclampsia with severe features and HELLP syndrome?
- 5) Is the platelet count appropriate for initiation of neuraxial blockade?
- 6) How do patients with preeclampsia typically respond hemodynamically to initiation of spinal anesthesia?
- 7) Do you plan on starting a phenylephrine infusion to prevent spinal-induced hypotension? If so, at higher or lower doses than a healthy parturient would receive?
- 8) Is neuraxial anesthesia preferable to general anesthesia in this case?
- 9) Is the lab work appropriately timed, or do you require a more recent platelet count? Is there a role for a coagulation profile (PT, PTT) prior to initiation of neuraxial blockade in this patient?
- 10) Is there a role for platelet transfusion prior to initiation of neuraxial anesthesia and analgesia in a patient with thrombocytopenia?
- 11) What is the normal coagulation profile in pregnancy? In patients with severe preeclampsia?

References

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