MOCK ORAL STEM – GALVAN/HOFKAMP

HPI: A 30 year old primigravid presented to her obstetrician’s office for a routine visit and was found to have new onset hypertension. She was admitted to the labor and delivery unit where she denied headache, visual disturbances, and abdominal pain. Fetal heart monitoring was reassuring.

PSH: none

PMH: none

Physical Exam: Height 170 cm, Mass 110 kg, BMI of 38.1, BP 140/89, HR 80, RR 20, 99% oxygen saturation on room air; HEENT: Mallampati Class 3, Neck: full range of motion, thyromental distance three fingerbreadths, Cor: regular rate and rhythm, trace edema in ankles, Pul: clear to auscultation bilaterally

Labs: Hgb 13 gm/dL, Platelets 101,000, urine protein/creatinine ratio undetectable, AST 20 units/L, ALT 30 units/L

MOCK ORAL STEM – GALVAN/HOFKAMP QUESTIONS

1. **INTRAOPERATIVE MANAGEMENT**
2. ***Blood pressure management:*** The blood pressure is now 159/110 with a reassuring fetal heart rate in the 130’s. What do you think about the blood pressure? Should it be lowered? How much? Are you concerned about lowering it too quickly?
3. ***Preeclampsia:*** The obstetric team has diagnosed the patient with preeclampsia based on the blood pressure and a urine protein/creatinine ratio of 0.3. A magnesium infusion was initiated. It has been four hours since admission. Would you want another platelet count prior to placement of a neuraxial anesthetic?
4. ***Choice of anesthetic technique:*** Would you place a regular epidural, a combined spinal epidural, or a dural puncture epidural? Why? Assume dural puncture epidural technique. Loss of resistance is obtained at 7 cm in the L4/L5 interspace. A spinal needle inserted through the Touhy needle and no cerebral spinal fluid (CSF) is obtained when the stylet is removed. What is the differential diagnosis for no CSF return? Would you thread a catheter? Why/why not? Is there any benefit to obtaining a new loss of resistance and obtaining CSF through a spinal needle? What if the patient became uncooperative with your repeated attempts?
5. ***Epidural test dose***: Prior to epidural placement, the patient was started on labetalol for blood pressure management. Would you still administer an epidural test dose? How would you determine if the catheter was intravascular?
6. ***Breakthrough pain*:** Two hours after neuraxial placement, the patient complains of 10/10 pain with contractions. On examination, the patient has a T8 level to cold sensation on the right side and a T12 level on the left side. What do you think is going on? What would you do? The patient receives two separate boluses of dilute local anesthetic through the catheter with minimal relief. A colleague suggests that the epidural catheter be replaced but the patient refuses. What would you say to the patient? What are your concerns about leaving the epidural in place?
7. ***Cesarean section:*** A cesarean section is called due to a non-reassuring fetal heart rate tracing. A focused physical exam reveals a T9 level on the right side and no discernable level on the left side. What do you think is going on? Would you bolus the epidural catheter with concentrated local anesthetic to achieve a surgical level? Would you remove the epidural catheter and attempt a spinal anesthetic? What dose would you use? What would be your concerns with such a technique? Your choice of regional technique fails and the obstetric team requests a general anesthetic. How would you induce general anesthesia for this patient? What are your concerns about general anesthesia in a parturient? Would you allow the patient’s husband to stay?
8. ***Emergence*:** At the conclusion of the operation, the patient appears weak and has a tidal volume of 150 ml. Succinylcholine was the only neuromuscular relaxant given. A train of four monitor revealed 4/4 twitches. What do you think is going on? Did the magnesium infusion have any role in the patient’s weakness? What would you do?
9. **POSTOPERATIVE MANAGEMENT**
10. ***Ventilator weaning*:** How would you wean this patient from the ventilator? Does it make any difference that she is immediately postpartum?
11. ***Postdural puncture headache*:** After being extubated, the patient complains of a headache. What is the differential diagnosis? How would you conduct a focused history/physical exam? Assume postdural puncture headache. What would you do for the patient? How would you perform an epidural blood patch?