Risk of High Spinal Anesthesia Following Failed Epidural Block for Cesarean Delivery

The Case

Shortly after an Oklahoma City OB patient presented to the hospital in labor, the anesthesiologist placed an epidural at L2/3. Twelve minutes later she gave the patient a test dose, followed by an initial “loading dose” of Ropivicaine with Fentanyl. This resulted in maternal hypotension (90/41) and fetal bradycardia (FHT 60-70). The anesthesiologist then proceeded to follow the loading dose with a continuous administration of Ropivicaine via epidural pump.

Twenty minutes later, the patient complained she could not swallow. The anesthesiologist was paged. She provided no new orders, and the patient continued to complain of an inability to swallow.

Four hours later, the OB wrote orders to prep the patient for a C-section. The anesthesiologist stopped the epidural pump and administered a 58.3ml local anesthetic. While the patient was still in the Labor and Delivery Room, she gave her a loading dose of 8ml Ropivicaine and 10mcg Fentanyl into the epidural catheter. Within twenty-five minutes the patient complained that she could not breathe. The anesthesiologist noted in the record that this happens sometimes “when the patient is moved around.”

Thirty minutes later the patient was transported to the OR for the C-section. The nurse’s note reflected “the patient appears to be asleep.” Upon arrival in the OR, the patient was aroused and again
commented that she could not breathe. The patient became unresponsive, and the anesthesiologist noted that she was in profound hypotension.

The incision was made for the C-section. Four minutes later the patient was intubated and the infant delivered immediately afterwards. A code was called for the mother. Resuscitation efforts failed, and the mother was pronounced dead. A healthy infant survived.

**The Allegations**

It was alleged that the anesthesiologist administered a high spinal, and did not check the level before administering the bolus prior to the C-section delivery.

**Disposition**

The case settled in the very high range on behalf of the anesthesiologist.

**Risk Management Commentary & Advice**

This case involves failure of the anesthesiologist to check the level of the anesthetic despite recurring patient complaints suggestive of a high anesthetic level. Our reviewers opined the patient suffered from a high spinal at the time of the second bolus, which led to respiratory arrest and death. The patient showed symptoms of a high spinal after the first bolus, and continued to have symptoms throughout the six hour labor.

Providers should check the level of the anesthetic before bolusing for conversion of a labor epidural to a C-section anesthetic, whenever symptoms are present, and especially when recurrent complaints suggest a high spinal.

**Reference**


Practice guidelines for obstetric anesthesia: an updated report by the American Society of Anesthesiologists Task Force on Obstetric Anesthesia.

American Society of Anesthesiologists, Park Ridge, Illinois, USA.

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