Debate: Urgent Cesarean Delivery for Failure to Progress in Labor: Patchy Block with Epidural – Plan is to Administer a Spinal

Pro: Single-Shot Spinal

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Objectives:

1. To understand which labor epidurals are likely to fail when dosed for cesarean delivery
2. To understand when and how it is safe to perform spinal anesthesia for cesarean delivery following a patchy block with a labor epidural

Summary: There are times when it is wise to do a spinal after a failed labor epidural and times when it is unwise to do so.

1. By far, the largest risk factor for a failed epidural after dosing for cesarean delivery is the need for frequent epidural top-ups and/or the requirement for large volumes of local anesthetic during labor. So, if the patient required frequent top-ups during labor, if the epidural was one-sided during labor, if there were missed segments during labor, if the patient did not have adequate pain relief during labor, do not try to use the epidural catheter for cesarean delivery. Just remove the catheter and do a spinal anesthetic. It is rare to have a high spinal if one has not tried to dose for cesarean delivery through the epidural catheter.

2. Dr. Gaiser recommends spinal anesthesia as long as the volume of epidural local anesthetic given for cesarean does not exceed 20 mL but admits that a high block is possible. His table reviews most of the case reports on the topic, and if you review his table, blocks high enough to require intubation have been reported after 15-20 mL of local anesthetic. But that is rare.

3. I believe it is generally wise to do a spinal after a failed epidural if the epidural block covered few dermatomes. I greatly reduce my spinal dose or do a general anesthetic instead if I have an extensive epidural block with sacral sparing or an extensive epidural block with just one critical missed dermatome.

4. Dr. Pan, et al. point out that the incidence of high block after dosing of a labor epidural for cesarean delivery is similar to the incidence of high block after spinal anesthesia after failure of dosing of a labor epidural for cesarean delivery. So, everything in life has risks.

Annotated Reference List:

1. Visser WA, et al. Spinal anesthesia for intrapartum cesarean delivery following epidural labor analgesia: a retrospective cohort study. Can J Anesth 2009;56:577-583. This is an excellent article. In addition, it references almost of the important case reports and case series of spinal after epidural anesthesia for cesarean delivery.
