

Pain management in obstetrics

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A majority of women experience severe pain during labor. An ideal technique for pain relief during labor should primarily reduce the intensity of pain and secondarily be safe for the mother and baby. Neuraxial techniques providing adequate labor analgesia safely will be discussed in this lecture.

Neuraxial techniques include the traditional single-shot analgesia, continuous epidural analgesia, patient controlled epidural analgesia, combined spinal epidural analgesia, and continuous spinal analgesia.

Single shot spinal analgesia has a quick onset time, but a limited duration of action. Continuous epidural analgesia with an epidural catheter allows the flexibility of extending the duration of analgesia and using the catheter for epidural anesthesia, if needed, by increasing the density of the block.

Patient controlled epidural analgesia has the advantage of minimal drug use, patient satisfaction due to self-administration of drugs, and reduced nursing intervention. Add-

ing the basal infusion option seems to improve overall patient satisfaction.

Combined spinal epidural analgesia incorporates the good qualities of both, the single-shot spinal and a continuous epidural. It allows for a quick onset and extended duration, if needed. Possible indications include early labor, late labor, and repeat cesarean section. A big drawback of the technique is the inability to test the epidural catheter during the duration of the initiating spinal block, especially if a stat cesarean section needs to be performed.

“Walking” epidural is a term typically given to this technique where spinal opiates are used in early labor followed by low dose local anesthetic in combination with an opiate as the epidural infusion. Patients are allowed to ambulate with assistance if they meet required criteria.

Continuous spinal analgesia with macro-catheters (28-25g) may provide a better option in the future. It prevents the concern for cauda equina syndrome that has been associated with micro-catheters.

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