

BACKGROUND

- Providing optimal epidural labor analgesia in morbidly obese parturients can be challenging for several reasons
- The intent of an epidural test dose with lidocaine and epinephrine is to avoid inadvertent injection of large volumes of local anesthetic intrathecally and/or intravascularly with adverse maternal and fetal consequences
- The following two cases detail scenarios in which the test dose resulted in an immediate posterior lumbar plexus block (LPB) indicating false loss of resistance

Case One

- 26y.o G2P0 at 39 1/7 weeks, BMI 58, requested labor epidural
- Perceived successful LOR to saline was noted and an epidural catheter for labor analgesia was sited.
- Following negative aspiration for CSF and blood, an epidural test dose of 45 mg lidocaine with 15 mcg epinephrine was administered
- Immediate numbness and motor weakness ensued in her right leg. Repeat aspiration for CSF was negative
- Following full recovery of motor strength and sensation 3-4 hours later, an epidural catheter was successfully placed

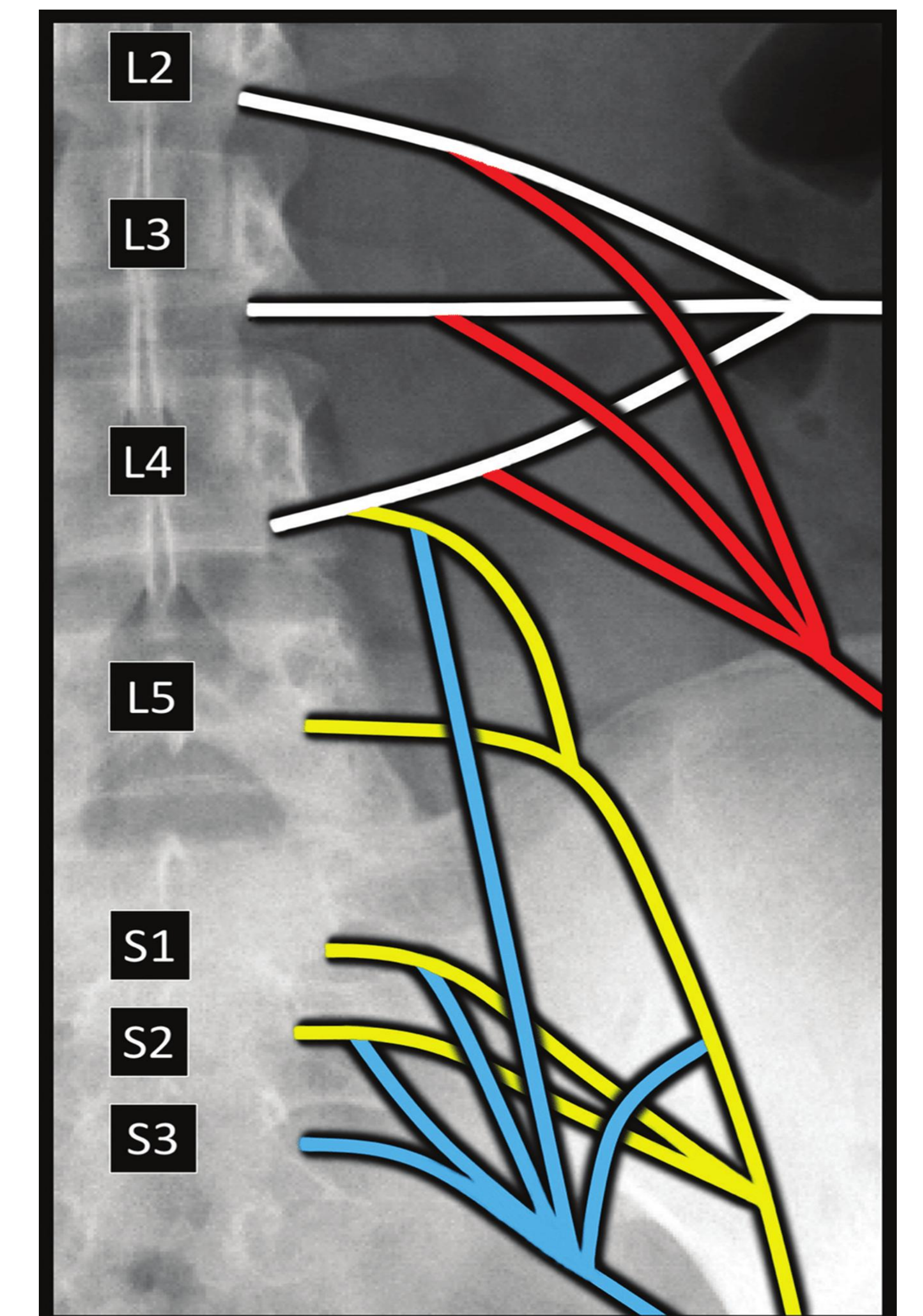
Case Two

- 29y.o G2P0 at 39 2/7 weeks, BMI 40, requested epidural analgesia
- The epidural catheter was ‘successfully’ placed with LOR to saline, following negative aspiration of CSF and blood, the test dose was administered
- The patient developed immediate significant motor weakness in one leg more than the other. CSF aspiration via catheter was negative. Following a reduced bolus dose, she developed hypotension and an uneven sensory level in her legs.
- No additional boluses were administered, and the catheter was subsequently replaced after regression of the predominantly unilateral block.

DISCUSSION/CONCLUSION:

- Although routine use of a test dose for labor epidurals is controversial, it provides integral information for safely placing and dosing epidural catheters.
- Morbidly obese patients have a higher incidence of operative delivery and airway related morbidity.
- Labor epidural is the ideal labor analgesic strategy for this patient population
- It is therefore imperative that a well functioning labor epidural be sited from a patient safety perspective.
- Both patients developed a Posterior Lumbar Plexus block with the test dose
- Posterior Lumbar Plexus Block could be a complication of a misplaced epidural catheter in super morbid obese patients. The epidural test dose helps in an early diagnosis of this block and further demonstrates the importance of a test dose in this patient population.

Lumbar Plexus



References:

Anesth Analg 2012;115:899 –903