

## Introduction

- Epidural anatomy is often overlooked but might influence neuraxial drug administration, effectiveness, and complications.
- Upper back/interscapular, neck, and shoulder pain during labor epidural analgesia (PLEA) is associated with nulliparity, obesity, increased epidural pressure, and subdural catheter.<sup>1</sup>

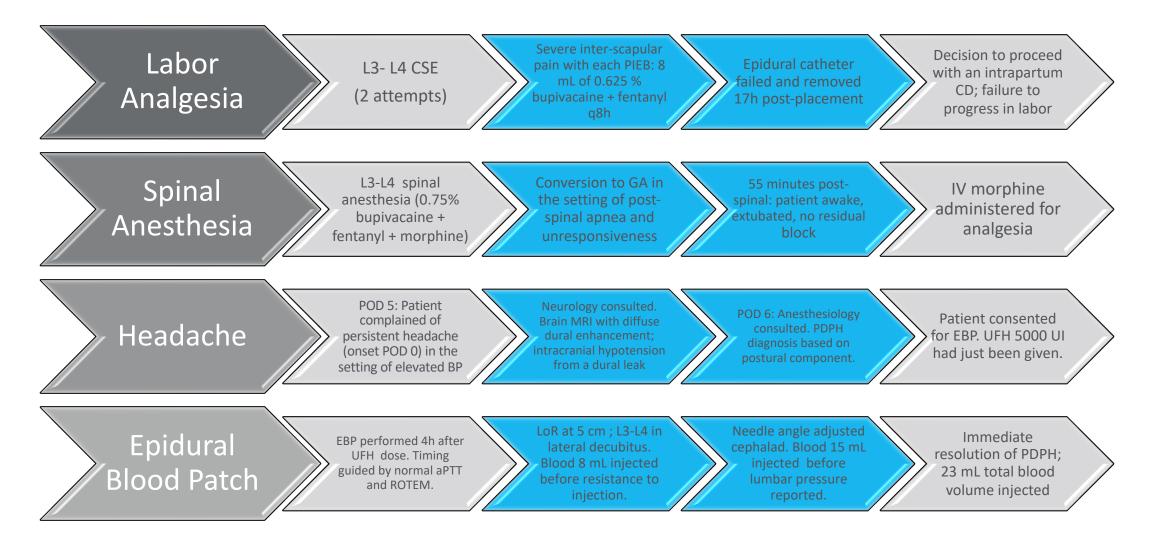
We present the case of a 27-year-old G1P0, BMI 41, who was admitted for induction of labor for pre-eclampsia with severe features after 2 weeks of frontal headaches. The case progressed to an intrapartum cesarean delivery with multiple anesthesia complications.

- o PLEA
- Epidural catheter failure
- High spinal or subdural anesthesia
- Post-dural puncture headache (PDPH).



1. Int J Obstet Anesth. 2024 Nov; 60:104255.





CSE: Combined Spinal Epidural; PIEB: Programmed Intermittent Epidural Bolus; CD: Cesarean Delivery; GA: General Anesthesia; POD: Post-Op Day; EBP: Epidural Blood Patch; UFH: Unfractionated Heparin; LoR: Loss of Resistance

## Discussion

Several elements suggest a narrow or low-compliance epidural space:

- 1. PLEA
- 2. Difficulty injecting through a previously functioning epidural catheter.
- 3. MRI consistent with a dural tear, likely occurring during initial CSE procedure.
- 4. Subdural anesthesia (more likely than high spinal) given the absence of sensorimotor block 55 min post-spinal.
- 5. EBP with needle redirection and divided blood injection volumes

PLEA and its known risk factors (young age, nulliparity, high BMI, prolonged epidural infusion, and required CD) could be a marker for a narrow epidural space or unusual anatomy and should be recognized as it may be associated with a series of complications.