

When Neuraxial is a No-No: General Anesthesia for a Parturient with Heart Failure and Cerebral Midline Shift

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Background

- Neuraxial anesthesia is preferred during cesarean delivery
 - Decreases risk of aspiration
 - Provides postoperative pain control
 - Avoids potential intubation difficulty
 - Allows for maternal wakefulness during birth
- Caution needed in patients with intracranial pathology
 - Risk of cerebrospinal fluid leak, cerebral hypoperfusion, and herniation

Case Presentation

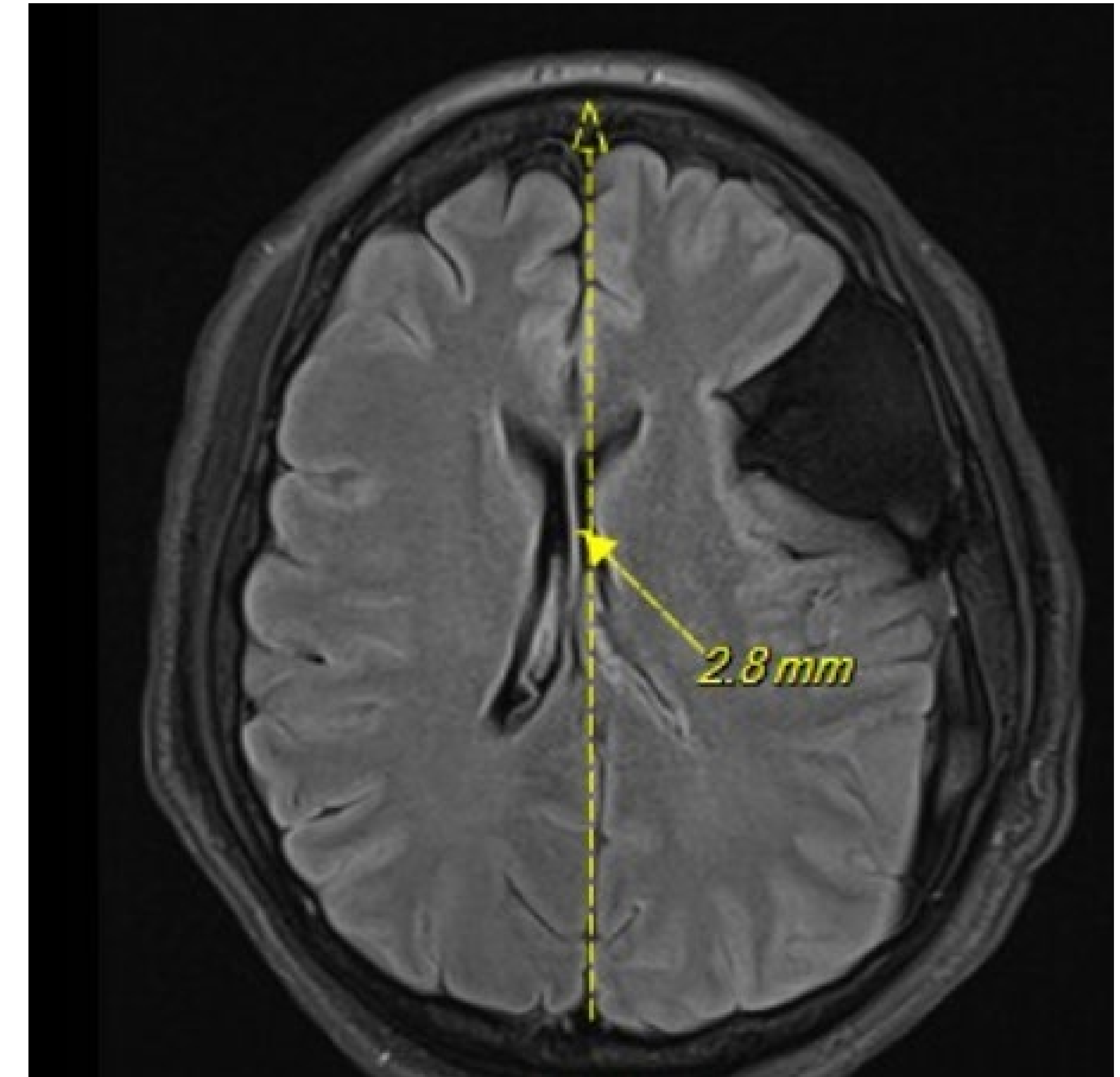
Patient: 32-year-old G9P3235 with:

- Non-ischemic cardiomyopathy (LVEF nadir 20-25%)
- Congenital arachnoid cyst
- Chronic subdural hematoma with mass effect and midline shift (new since prior delivery)
- Polysubstance use
- Two prior cesarean deliveries with neuraxial anesthesia

Procedure: Cesarean delivery at 36 weeks

Anesthetic Plan: General anesthesia

- Access: 2 peripheral IVs and 1 pre-induction arterial line
- Induction: Rapid sequence intubation with video laryngoscopy
- Maintenance: Propofol infusion
- Hemodynamic Management: Clevidipine for intraoperative hypertension
- Pain control: Fentanyl, Acetaminophen, Ketorolac, Bilateral transverse abdominis plane blocks with liposomal bupivacaine



Outcome and Take-Home Point

Outcome

- Uncomplicated intubation, anesthetic, and extubation
- Cesarean delivery performed without complication (quantitative blood loss of 392 mL)
- Post-operative pain well-controlled with scheduled acetaminophen and ibuprofen and as-needed oxycodone
- Patient was discharged on post-operative day 5

Take-Home Point

- While neuraxial anesthesia is preferred for cesarean delivery, the presence of increased intracranial pressure warrants careful preoperative evaluation and planning to ensure patient safety