Neuraxial Anesthesia for a Parturient with a Spinal Cord Tumor:

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- Coordination of care regarding neuraxial anesthesia for labor and delivery in the setting of patients who have neurological tumors is an important topic in Obstetric Anesthesia.
- Neuraxial tumors or remnants of are not absolute contraindication but carries significant risks that require careful individualized risk-benefit assessment.
- Each parturient case requires careful evaluation and be well informed of the risks and benefits of all their anesthesia options.
- Today, we present the evaluation and management of a patient with an intramedullary spinal tumor whose infant was delivered via cesarean section (CS) under neuraxial anesthesia.

Vercauteren M, Acta Anaesthesiol Scand., 2011; ACOG, Obstetrics and Gynecology. 2019

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37-year-old G2P0010 at 39w0d with a T4-T8 pilocytic spinal astrocytoma s/p partial intradural tumor resection and laminectomy in 2014

Prior to referral:
- Parturient still had residual tumor at T4/T5 with autonomic dysreflexia but improved neurological, GI, and urological symptoms.
- Last image in 2015 showed some myelomalacia within the cord from the tumor resection but did not reveal any new masses, no cord tethering, or changes in cord signal or diameter.

At high-risk OB Anesthesia Pre-op Clinic:
- Maternal Fetal Medicine scheduled patient for CS for delivery to better control clinical variables.
- Repeat MRI Total Spine showed expected post-operative changes, no acute pathology, and no evidence of Chiari malformation
- Neurosurgery had no contraindication for spinal anesthesia since MRI spine was reassuring and showed expected post-operative changes.
- Obstetric Anesthesia counseled patient on epidural, spinal analgesia, and GETA.

Intraoperatively:
- Successful standard spinal block placement at L3-L4 , with T5 bilateral Dermatome level.
- Hemodynamic stability with pelvic stimulation during CS.
- Duramorph for post-operative pain relief.

Postoperatively:
- The parturient reported no new neurologic symptoms, and her motor and sensory exams were unchanged from baseline.

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Teaching Points

- Identifying the best mode of delivery, deciding on the safety of neuraxial anesthesia, and understanding the proper workup prior to anesthesia and delivery.
- Although inadequate local anesthetic spread can be a limitation to neuraxial for these patients, thorough coordination, workup, and counseling on options can often lead to safe delivery with neuraxial anesthesia.
- Overall, discussing cases like this may encourage providers to offer neuraxial analgesia to similar patients instead of defaulting to GETA and makes this an interesting discussion in the broader obstetric anesthesia community.

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