INTRODUCTION
Intracranial pathology remains a contraindication to neuraxial technique for fear of herniation or neurologic deterioration. Here we present a careful CSE technique in a morbidly obese parturient undergoing urgent cesarean section with recent asthma exacerbation, signs of difficult airway and frontal glioma with past history of seizure.

Case Presentation
The patient consented to this report. Our patient was a G3P2, 32 year old admitted at 35+0 weeks for non-reassuring heart rate and asthma exacerbation. History was remarkable for severe asthma, obesity (BMI of 53), and frontal low-grade glioma, with past seizures.

MR imaging of her lesion from 2013 showed a stable, 2.6x1.2x1.1 cm mass in the right frontal lobe (Figure 1). No findings of increased mass effect were found. A CT head ordered at 26 weeks gestation showed no change. We consulted with the neurosurgery team who felt it would be safe to proceed with neuraxial technique given the stability in the patient’s lesion.

The patient was 168cm tall and 148kg. Vitals were normal. Airway examination revealed a thick neck, Class III Mallampatti with otherwise normal features. Two anesthesiologists were present for the emergent section. A pre-procedure arterial line was placed. Under aseptic technique and in the sitting position, a combined spinal epidural block was performed at the L3-4 level using an 18G Touhy and 26G Pencan pencil point needle. Two attempts were required for loss of resistance at 9.5cm, after which the dura was punctured and 1.5ml of 0.75% Bupivacaine with 15ug Fentanyl and 100ug of Epimorph were injected.

Two units of RBCs were given for blood loss of 1500ml due to uterine atony. There were no other complications.
DISCUSSION
While there are several reports of successful regional procedures performed for patients with intracranial neoplasms, increases in CSF pressure can not be confidently avoided\(^1,2,3,4,5,6\). Cases of stable, slow growing brain tumours located away from CSF pathways may cause little ventricular compromise due to compensatory caudal displacement of CSF or blood volume instead of brain mass\(^7\). In hopes of avoiding theoretical dural compression, we opted for a technique that would allow for titratable analgesia achievable with small volumes and avoid a potential high risk general anesthetic. In our case, the patient’s physical examination, imaging, and multidisciplinary discussion reassured us that there was no rise in intracranial pressure and her tumour was stable.

Anesthesia for parturients with brain tumours or raised intracranial pressure must be approached with caution\(^6\). The decision between general or regional anesthesia is one that should be made on an individual patient basis in collaboration with the patient and multidisciplinary care teams.

References:


