Abstract # 104

Neuraxial Analgesia in a Pregnant Woman with a History of Spontaneous Dural Tear: A Case Report

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Background: Spontaneous dural tears with cerebrospinal fluid (CSF) leakage have been previously described (1), however our literature search shows no reports of neuraxial blocks in patients with a previous history of spontaneous dural tears. We present a case report of neuraxial block in a pregnant woman after a surgically repaired spontaneous CSF leak.

Case: A 33 y.o. G3P2002 with a history of hypothyroidism and DVT and one episode of spontaneous dural tear was admitted to the labor and delivery unit for labor. The spontaneous dural tear was diagnosed on a CT myelogram performed about 18 months prior to the current admission after 7 months of failed conservative treatment for positional headaches, nausea and visual field changes. Multiple epidural blood patches were also unsuccessful. She then successfully underwent a surgical repair of the dura at the thoracic level with complete long-term resolution of symptoms. At this admission patient requested an epidural for labor analgesia and after discussion of risks and benefits we proceeded to perform epidural analgesia. The first attempt at placing an epidural catheter by a resident anesthesiologist resulted in dural puncture. The epidural needle was removed and the staff anesthesiologist performed a spinal block for labor. The rest of the patient’s intrapartum and postpartum course uncomplicated and she was discharged home. On the 4th post-partum day, patient reported a severe positional headache without any other associated symptoms. Conservative measures were unsuccessful in managing her pain and patient was referred to an outpatient pain management clinic for an epidural blood patch under fluoroscopic guidance. Patient reported immediate alleviation of symptoms after the blood patch and continued to remain symptom free at a follow-up 2 weeks after the procedure.

Conclusion: While being a known complication of epidural neuraxial block in any patient, accidental dural puncture in this patient with a history of a spontaneous dural tear could be secondary to an underlying dural pathology, changes in the dura or the epidural space from the surgery to repair the tear or from operator technique. Other issues to consider in patients with history of spontaneous dural tear presenting for neuraxial blocks include risks and benefits of a spinal vs. epidural block, operator experience, and technical considerations of performing a neuraxial block as well as the extent of spread of local anesthetic in the epidural and/or spinal space in patients who have had surgical repairs. Use of guided techniques for the initial neuraxial block or for treatment of post dural puncture headache, failure of traditional therapies for post-dural puncture headaches, and possibility of surgery for repair of a dural hole should also be discussed.

References: