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What We DO Know:

- Chronic CSF leaks are a rare but increasingly seen cause of chronic headaches
- While the etiology remains unclear, some cases may be precipitated by sudden mechanical triggers
- Diagnostic methods include CT Myelography and MRI Brain with Contrast (to detect intracranial hypotension)
- Symptoms are usually self-limited, but some patients require interventions such as an epidural blood patch or surgery

What We DON'T Know:

Studies on neuraxial anesthesia in patients with chronic CSF leaks are limited

Objective:

large, quaternary healthcare system

Mission Possible: Case Series of Successful **Neuraxial Procedures for Parturients with Chronic CSF Leaks**

• Review the management of neuraxial anesthesia in parturients with a history of chronic CSF leaks at a

Arrow: CSF leak shown in CT myelography













Search Criteria

Terms searched using regular expressions (regex):

- spontaneous CSF leak
- spontaneous spinal cerebrospinal fluid leak
- idiopathic intracranial hypotension
- spontaneous intracranial hypotension
- spontaneous spinal CSF leak
- spontaneous dural tear











Case	Potential Triggers	Previous Treatment	Symptom Onset to Delivery (Years)	Active Symptoms at Delivery?	Mode of Delivery	Anesthesia Type (Needle Size)	Head <i>a</i> Exacerb
1	MVA	Blood Patch	0.8	Yes	SVD	EPL (17G)	Yes
			6.7	No	SVD	EPL (17G)	Nc
2	Unknown	Blood Patch	1.1	Yes	SVD	EPL (18G)	Nc
3	URI	Blood Patch, Fibrin Glue Patch	2.8	Yes	SVD	None	Nc
4	Calcified Disc Protrusion	Blood/Fibrin Glue Patch, Surgical Repair	0.4	No	SVD	EPL (17G)	Nc
5	Vomiting	Conservative	0.5	No	SVD	EPL (17G)	Nc
			3.5	No	SVD TL	EPL (17G) Spinal (25G)	Nc
6	Unknown	Blood Patch	2.2	No	CD (breech)	Spinal (25G)	Yes (PE
			4.4	No	SVD	None	Nc
7	Unknown	Conservative	2.4	No	CD (NRFHT)	EPL (17G)	Nc
8	Coughing	Blood Patch	3.4	No	SVD	EPL (17G)	Nc
			5	No	SVD	DPE (17G + 25G)	Nc
9	Fall	Blood Patch	8.4	No	SVD	EPL (17G)	Nc
			10.5	No	SVD	EPL (17G)	Nc
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CD: Cesarean Delivery, DPE: Dural Puncture Epidural, EPL: Epidural (without dural puncture), MVA: Motor Vehicle Accidents, NRFHT: Non-Reassuring Fetal Heart Tracing, PDPH: Post Dural Puncture Headache, SVD: Spontaneous Vaginal Delivery, TL: Tubal Ligation, URI: Upper Respiratory Infection

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ache oated?

DPH)





CONCLUSIONS

- Neuraxial anesthesia can be performed safely among patients with CSF leaks
- Efficacy of epidurally-administered medications may be unpredictable > Due to the potential communication between epidural and intrathecal spaces
- Assessment of CSF return during spinal or epidural placements may be difficult > Due to the preexisting CSF collection in the epidural space
- Pushing during a vaginal delivery can worsen CSF leaks
- Additional dural puncture, regardless of intent, can exacerbate preexisting symptoms
- Detailed counseling on these risks and careful titration of medication are the keys to successful management of patients with CSF leaks

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