



## [ PICTURES IN CLINICAL MEDICINE ]

## Headache due to Spontaneous Spinal Cerebrospinal Fluid Leaks

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Picture.

A 15-year-old boy presented to the emergency department with severe headache one day after a football game. He received no severe contact injuries during the game. Despite receiving intravenous hydration shortly after the game, his symptoms subsequently worsened. A physical examination revealed upper limb numbness and headache that increased in severity upon sitting or resuming standing. Brain magnetic resonance imaging (MRI) was normal, but T2-weighed MRI of the spine revealed cerebrospinal fluid leakage at the thoracic (Picture A, arrow) and lumbar (Picture B, arrow) spine. Spontaneous intracranial hypotension due to spontaneous spinal cerebrospinal fluid leaks was diagnosed. An epidural blood patch resulted in the resolution of the symptoms and the disappearance of the abnormal leaks on follow-up MRI. This treatable disorder has emerged as a significant cause of orthostatic headaches (1) that can compromise the quality of life if left untreated (2). Spinal MRI is a useful screening tool for detecting leaks.

## The authors state that they have no Conflict of Interest (COI).

## References

- 1. Mokri B. spontaneous low pressure, low CSF volume headaches: spontaneous CSF leaks. Headache 53: 1034-1053, 2013.
- Mokri B, Schievink WI. Headache associated with abnormalities in intracranial structure or function: low-cerebrospinal-fluidpressure headache. In: Wolff's Headache and Other Head Pain. 8th ed. Silberstein SD, Lipton RB, Dodick DW, Eds. Oxford, New York, 2007: 513-531.

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