An unexpected cause of orthostatic headache

Delayed postlaminectomy pseudomeningocele

Figure Head MRI with changes of intracranial hypotension and myelogram showing delayed onset pseudomeningocele at the postoperative site

(A) Low-lying cerebellar tonsils (dashed arrow) and orbitofrontal compression over sphenoid sinus (arrow). (B) Mild diffuse dural enhancement overlying both cerebral hemispheres and sagittal venous sinus dilatation (arrow). (C) Active contrast extravasation into a large 4 cm × 2.4 cm × 2.9 cm pseudomeningocele from (D) the left L5-S1 hemilaminectomy defect (indicated by arrows).

A 41-year-old woman underwent a left L5-S1 hemilaminectomy 7 months prior to the onset of an acute postural headache. MRI brain revealed intracranial hypotension. Two empiric blood patches were unsuccessful. CT myelogram showed a large pseudomeningocele at the surgical site not noted on MRI lumbar spine obtained 2 months postoperatively. Facet instability post-mesial facetectomy likely caused a dural tear on resumption of normal activity. The headache resolved after pseudomeningocele closure. Postoperative pseudomeningocele formation is well-recognized,¹ but acute orthostatic headache from delayed pseudomeningocele formation at a spinal surgical site has been only once previously described² and should be considered.

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