Spontaneous intracranial hypotension diagnosed as Chiari I malformation

Figure MRI after headache consultation

(A) Noncontrast MRI shows 17-mm tonsillar descent and flattening of the anterior pons. (B, C) Contrast-enhanced MRI shows enlarged, rounded venous sinuses, pituitary hyperemia, and extensive pachymeningeal enhancement. (D) Superior extent of ventral extradural collection. (E) Posteriorly displaced dura. (F) Extruded T1-2 disc (arrow) is the presumptive cause.

A 44-year-old man presented for evaluation with a recent MRI diagnosis of a Chiari I malformation without hydrocephalus and a 5-month history of gradually worsening daily headache. He described 10/10 occipital pressure spreading holocranially, triggered by Valsalva, and worsened with prolonged standing. He was pain-free within 10 minutes of lying supine. His initial imaging showed a 17-mm Chiari I malformation. Repeat imaging is demonstrated in the figure. Several upper thoracic disc extrusions are potential etiologies for the leak, particularly at T1-T2. This case illustrates that a CSF leak can be mistaken for a Chiari I malformation radiographically.

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