Intracranial hypotension secondary to spontaneous spinal cerebrospinal fluid leaks

Hipotensão intracraniana secundária a fístula líquórica espinhal espontânea

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A 37-year-old woman presented with acute orthostatic hypotension and diffuse headache. Brain magnetic resonance imaging (MRI) revealed T2 hyperintense bilateral subdural effusions, diffuse pachymeningeal enhancement, slit ventricles and venous engorgement compatible with spontaneous intracranial hypotension. Single photon emission computed tomography with computed tomography (CT) and CT-cisternography showed a cerebrospinal fluid (CSF) leak at the left C1-C2 transition. Spontaneous intracranial hypotension is a rare cause of daily headache, which remains largely underdiagnosed¹,², and current evidence indicates that this condition is the result of a spontaneous CSF leak¹²³⁴. This case illustrates the importance of CT-cisternography in the detection of CFS leak¹²³, allowing appropriate diagnosis and treatment.

Figure 1. Coronal T1 post contrast MRI demonstrates pachymeningeal enhancement (arrows); (B) axial T2 weighted MRI demonstrates subdural effusions (arrows); (C) Sagittal T1-weighted post contrast demonstrates engorgement of the superior sagittal sinus (straight arrow) and sagging of the brain (flattening of the pons and obliteration of prepontine cistern, curved arrow).

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Figure 2. Sagittal and axial sections of CT-cisternography (A) axial and (B) sagittal show a C1-C2 left cerebrospinal fluid leak, with left fluid paravertebral collection (arrows).

References