

# Teaching NeuroImages: Intracranial hypotension in a patient with Marfan syndrome

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**Figure 1** Dural ectasia on spine MRI



Sagittal T2-weighted image of the lumbosacral spine showing dural ectasia.

An 18-year-old man with Marfan syndrome and migraine headaches presented with acute worsening of headaches with postural changes following spinal fusion surgery for scoliosis. Lumbar spine MRI done before surgery showed diffuse dural ectasia (figure 1). Brain MRI after surgery showed distended transverse and sagittal dural venous sinuses<sup>1</sup> and an enlarged pituitary gland suggesting intracranial hypotension (figure 2). He was treated conservatively with rest, fluids, and caffeine. Patients with Marfan syndrome frequently have dural ectasia<sup>2</sup> and are at risk of CSF leaks after spinal surgery leading to intracranial hypotension. Our case highlights subtle changes on brain MRI suggesting intracranial hypotension.

#### AUTHOR CONTRIBUTIONS

Dr. Amal Abu Libdeh: chart review, drafting the manuscript, analysis and interpretation of data. Dr. Radhika Dhamija: acquisition of data, study

supervision, and critical revision of the manuscript. Dr. Julie A. Matsumoto: analysis and interpretation of data, critical revision of the manuscript.

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#### DISCLOSURE

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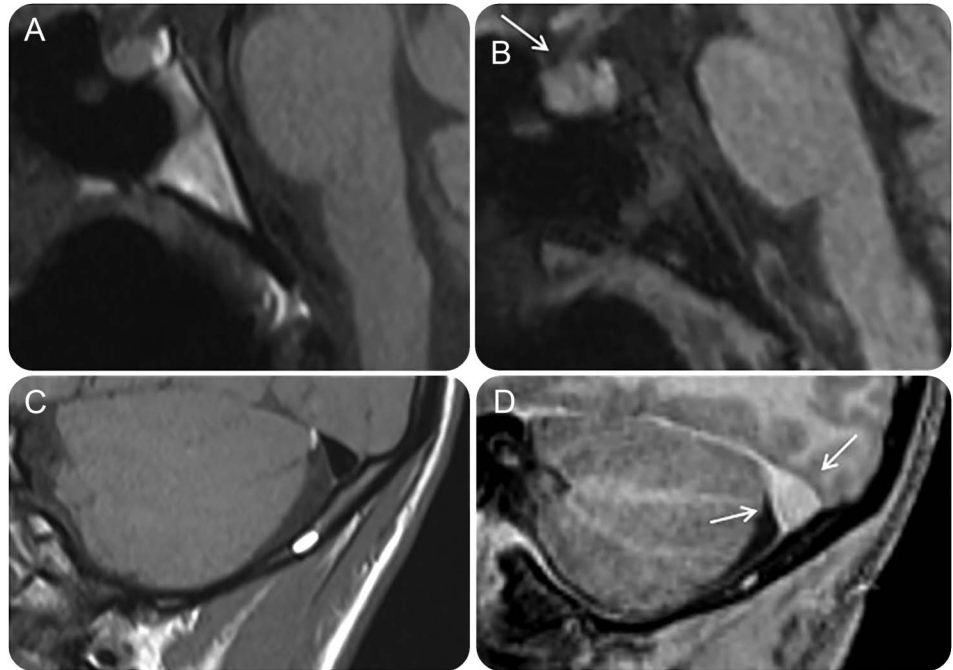
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**Figure 2** Signs of intracranial hypotension on brain MRI



(A, B) Sagittal T1-weighted images before surgery. (C, D) Sagittal postcontrast T1-weighted images after surgery. Mild enlargement of pituitary gland (B, arrow) and convex margins of the transverse dural sinuses (D, arrows) after surgery, suggesting intracranial hypotension.

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