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Far Lateral Approach for Disconnection of Craniocervical Junction Dural Arteriovenous Fistula Presented with Myelopathy and Hydrocephalus

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Abstract

We report a case of craniocervical junction dural arteriovenous fistula (dAVF) presented with myelopathy and normal pressure hydrocephalus, and was treated with hybrid approach of embolization and surgical disconnection. A 68-year-old gentleman presented with 1 year history of unsteady gait and sphincter disturbance. Magnetic resonance imaging (MRI) showed abnormally enlarged and tortuous vessels over right cerebellomedullary cistern. Digital subtraction angiogram (DSA) showed Cognard's type-V dAVF at craniocervical junction. Catheter embolization was performed via external carotid artery and finally surgical disconnection was done with far lateral approach (**-Fig. 1**). Postoperative DSA showed no more arteriovenous shunting (**-Fig. 2**). Clinically the patient improved after a course of rehabilitation. Dural AVF at craniocervical junction is rare and its clinical presentation can be highly variable from subarachnoid hemorrhage to brainstem dysfunction. Identification of the exact fistula site is essential in surgical planning. Surgery is effective and safe to achieve complete obliteration and good clinical outcome.^{1–6}

- Keywords
- dural arteriovenous fistula
- craniocervical junction
- far lateral approach
- myelopathy
- hydrocephalus

The link to the video can be found at: https://youtu.be/xI48stSIWpY.



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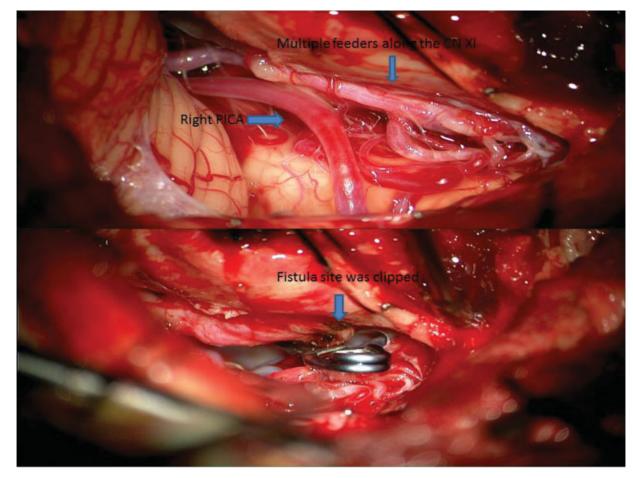


Fig. 1 Intraoperative photos showing the anatomy (upper) and the fistula site (lower).

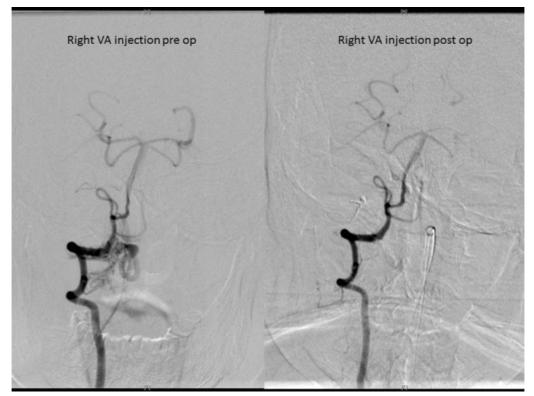


Fig. 2 Post operative DSA (right) showing complete eradication of arteriovenous shunting.

Disclosures

The authors declare that they have no conflict of Interest.

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