Rare, Intradural, Double Draining Veins in a Spinal Dural Arteriovenous Fistula

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Figure 1 Preoperative Spinal Images

(A, B) MRI shows spinal edema and intramedullary enhancement. (C, D) Angiography reveals a spinal dural arteriovenous fistula (arrowhead) with double draining veins (arrows).

A 59-year-old man presented with a 9-month history of progressive weakness and numbness in his lower extremities (grade 4/5). Spinal MRI demonstrated extensive edema in the spinal cord and prominent intramedullary enhancement. Selective angiography revealed a right L1 spinal dural arteriovenous fistula (SDAVF) with intradural double draining veins (figure 1). The fistula was treated with surgery successfully. The patient's symptoms gradually improved after surgery. Postoperative MRI showed significant resolution of the edema and enhancement (figure 2). SDAVF with intradural double draining veins is extremely rare.^{1,2} This case clearly showed a rare draining pattern of intradural double draining veins in SDAVF.

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Figure 2 Intraoperative and Postoperative Images

(A, B) Intraoperative views show spinal dural arteriovenous fistula (arrowhead) with double draining veins (1 and 2, arrows) and the fistula divided surgically. (C, D) Postoperative MRI reveals significantly reduced spinal edema and enhancement.

Appendix Authors

Name	Location	Contribution
Xiaodong Niu, MD	West China Hospital of Sichuan University, Chengdu, China	Drafting/revision of the manuscript for content, including medical writing for content; major role in the acquisition of data; study concept or design
Tongyu Wang, MM	West China Hospital of Sichuan University, Chengdu, China	Drafting/revision of the manuscript for content, including medical writing for content; major role in the acquisition of data
Cong Wu, MD	West China Hospital of Sichuan University, Chengdu, China	Drafting/revision of the manuscript for content, including medical writing for content

Appendix (continued)

Name	Location	Contribution
Jin Li, MD, PhD	West China Hospital of Sichuan University, Chengdu, China	Drafting/revision of the manuscript for content, including medical writing for content; study concept or design; analysis or interpretation of data

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