Spinal hemangioblastoma arising from cervical nerve root

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Neurology® 2020;95:791-792. doi:10.1212/WNL.0000000000010836

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Figure 1 MRI findings

Preoperative imaging revealed a hypointensity mass in sagittal T1 (A) and hyperintensity in T2-weighted imaging (B). The lesion was cystic-solid in sagittal (C) and coronal (D) imaging after administration of gadolinium and axial enhanced MRI (E) showed it was extramedullary. Postoperative contrast-enhanced MRI (F) depicted the tumor was totally resected.

A 39-year-old woman presented with neck and shoulder pain for 3 months. The MRI scan revealed a cystic-solid lesion located at C5 (figure 1, A–E). The patient received an operation and a small blood blister-like soft mass was detected. The tumor originated from proximal cervical nerve root and compressed the spinal medulla (figure 2, A–C). Pathologic diagnosis was hemangioblastoma (figure 2D). Postoperative gadolinium-enhanced MRI showed a gross total resection of the tumor (figure 1F). Spinal hemangioblastomas frequently originate from the medulla,¹ and nerve root originated hemangioblastoma is scarce. Our case provides a direct-viewing description and pathologic confirmation of a new subset of classification for origin of spinal hemangioblastomas.

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Figure 2 Operative and pathologic findings

During operation, a soft blood blister-like mass was detected (A). After carefully dissecting it, we found that the lesion arose from the proximal cervical nerve root (arrow), compressing the spinal medulla (asterisks) (B). The tumor was totally resected so that the nerve root (arrow) and spinal medulla (asterisks) were revealed (C). Hematoxylin & eosin (magnification, $\times 200$) (D) showed large intratumoral vascular channels, loose stromal elements, and prominent capillaries characteristic of a hemangioblastoma; the nerve root tissue (asterisks) is surrounded by tumor stroma.

Study funding

No targeted funding reported.

Disclosure

The authors report no disclosures relevant to the manuscript. Go to [Neurology.org/N](https://www.neurology.org/N) for full disclosures.

Appendix Authors

Name	Location	Contribution
Jiuhong Li	Chengdu, Sichuan, China	Study design, data collection and analysis, drafting the manuscript, analysis and interpretation of data
Jiaojiang He	Chengdu, Sichuan, China	Data collection, drafting the manuscript, revising the manuscript

Appendix (continued)

Name	Location	Contribution
Susu Lu	Chengdu, Sichuan, China	Acquisition of data, analysis and interpretation of data, drafting the manuscript
Xuhui Hui	Chengdu, Sichuan, China	Study concept and design, study supervision, revising the manuscript
Haifeng Chen	Chengdu, Sichuan, China	In charge of surgery, study concept and design, clinical care and investigative workup of the patient

Reference

1. Westwick HJ, Giguere JF, Shamji MF. Incidence and prognosis of spinal hemangioblastoma: a surveillance epidemiology and end results study. *Neuroepidemiology* 2016;46:14–23.

Neurology®

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Neurology 2020;95:791-792 Published Online before print September 15, 2020

DOI 10.1212/WNL.0000000000010836

This information is current as of September 15, 2020

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