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Teaching NeuroImage: Lower Limb Muscle Weakness Due to Intramedullary Spinal Cord Lipoma

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Neurology® 2022;99:724-725. doi:10.1212/WNL.0000000000201167

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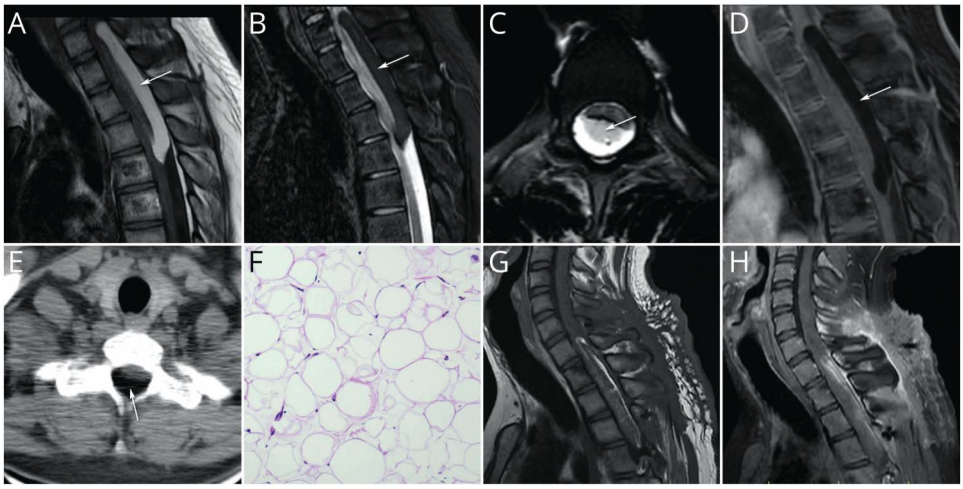
Figure Pre- and Postoperative Imaging of Intramedullary Spinal Cord Lipoma



(A–C) T1-weighted, fat-suppressed T2-weighted, and T2-weighted images showed an intramedullary homogeneous lesion extending from C7 to T4. (D) Postcontrast T1-weighted imaging showed no enhancement. (E) CT showed a fatty lesion (–131 HU). (F) Lipoma was consisted of mature adipocytes (H&E: 200×). (G and H) After the subtotal resection, MRI showed the residual lesion.

A 24-year-old man presented with a 6-month history of weakness of the right lower limb, without upper extremity weakness. Spinal cord CT/MRI showed an extensive intramedullary lesion from C7 to T4, with classical radiologic features of lipoma (Figure). There was no spinal dysraphism. Subtotal resection of the lesion was performed. The pathology confirmed the diagnosis of lipoma. Postoperatively, the patient's motor function temporarily deteriorated. The symptoms improved after 2-month rehabilitation. Nondysraphic spinal intramedullary lipomas are extremely rare, constituting approximately <1% of all intraspinal tumors.[1,2] MRI is the most sensitive imaging protocol; typical radiologic appearances can confirm diagnosis and avoid biopsy.

Acknowledgment

We all express our gratitude to the patient, who kindly gave consent for publishing this paper.

Study Funding

No targeted funding reported.

Disclosure

The authors report no relevant disclosures. Go to Neurology.org/N for full disclosures.

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Publication History

Received by *Neurology* March 5, 2022. Accepted in final form July 11, 2022. Submitted and externally peer reviewed. The handling editor was Roy Strowd III, MD, Med, MS.

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Name	Location	Contribution
Haijuan Lv, MD	Department of Radiology, The Second Affiliated Hospital of Jiaxing University	Drafting/revision of the manuscript for content, including medical writing for content; Major role in the acquisition of data
Hongwei Zhao, MD	Department of Radiology, The Second Affiliated Hospital of Jiaxing University	Drafting/revision of the manuscript for content, including medical writing for content; Study concept or design
Cai Yu, MD	Department of Diagnostic and Interventional Radiology, University of Texas Health Science Center at Houston	Drafting/revision of the manuscript for content, including medical writing for content; Additional contributions: Improved the writings.

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Neurology 2022;99;724-725 Published Online before print August 26, 2022
DOI 10.1212/WNL.0000000000201167