Teaching NeuroImages: “Pancake-like” gadolinium enhancement suggests compressive myelopathy due to spondylosis

A 41-year-old man developed progressive bilateral hand weakness and spastic paraparesis. MRI demonstrated cord edema and “pancake-like” gadolinium enhancement (figure). Inflammatory/neoplastic causes were investigated and not found. He continued to deteriorate despite empiric corticosteroid treatment. One year later, cervical decompression stabilized his clinical condition but intramedullary T2 signal worsened. Persistent enhancement raised concern about alternative diagnoses.

“Pancake-like” enhancement due to focal disruption of the blood–brain barrier at the point of maximal stenosis strongly suggests cervical stenosis as the cause of the myelopathy. Enhancement may persist after successful surgery. Inflammatory/neoplastic myelopathies have long rostrocaudal segments of enhancement. Recognition of this radiologic feature may prevent subsequent disability.

AUTHOR CONTRIBUTIONS
Dr. Flanagan was involved in drafting and revising the manuscript for content, including medical writing for content, analysis and interpretation of data, and acquisition of data. Dr. Marsh was involved in revising the manuscript for content and analysis and interpretation of data. Dr. Weinshenker was involved in drafting and revising the manuscript for content, including medical writing for content, analysis and interpretation of data, acquisition of data, and study supervision.

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REFERENCES

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