

Teaching Video NeuroImage: Inverted Radial and Wartenberg Thumb Reflex in Cervical Myelopathy

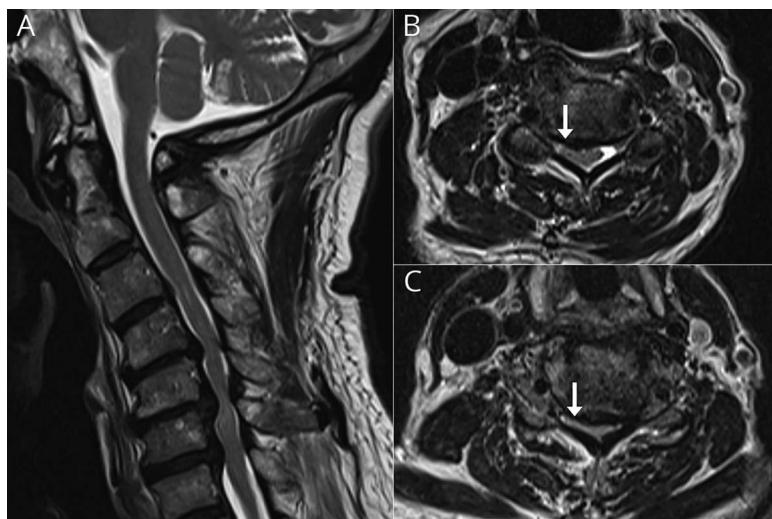
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Neurology® 2022;98:e1092-e1093. doi:10.1212/WNL.00000000000013262

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Figure MRI of the Cervical Spine, Sagittal (A) and Axial (B and C) Views, Demonstrating Severe Multilevel Degenerative Cervical Spondylopathy With Large Disc Osteophyte Complexes at C4-5 and C5-6 and Right-Sided Spinal Canal Narrowing (Arrows) With Cord Compression



A 75-year-old man developed progressive right-hand weakness over 3 years. Examination revealed myelopathic hand, inverted radial reflex, and Wartenberg thumb reflex (Video 1). MRI demonstrated cervical spondylotic myelopathy (Figure). Surgical decompression stabilized symptoms.

Inverted radial (supinator) reflex is a myelopathic sign localizing to C5-6.¹ Interruption of C5-6 roots and pathologic spread to C8 roots lead to absent brachioradialis contraction with finger flexion.¹ Wartenberg thumb reflex (distinct from unrelated Wartenberg² sign in ulnar neuropathy) is an early sign that may precede pyramidal weakness—when the affected hand applies forceful flexion at the terminal phalanges there is adduction, flexion and opposition of the thumb.

Acknowledgment

The author thanks the patient for permission to publish this video.

Study Funding

The author reports no targeted funding.

Disclosure

T. Chen reports no disclosures relevant to the manuscript. Go to [Neurology.org/N](https://www.neurology.org/N) for full disclosures.

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Appendix Author

Name	Location	Contribution
Tychicus Chen, MD, FRCPC	Division of Neurology, Department of Medicine, University of British Columbia, Canada	Drafting/revision of the manuscript for content, including medical writing for content, major role in the acquisition of data, study concept or design, and analysis or interpretation of data

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Neurology 2022;98:e1092-e1093 Published Online before print December 22, 2021

DOI 10.1212/WNL.0000000000013262

This information is current as of December 22, 2021

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