

# Teaching NeuroImages: Sulcal artery syndrome

## A hemicord infarct presenting with incomplete Brown-Sequard syndrome

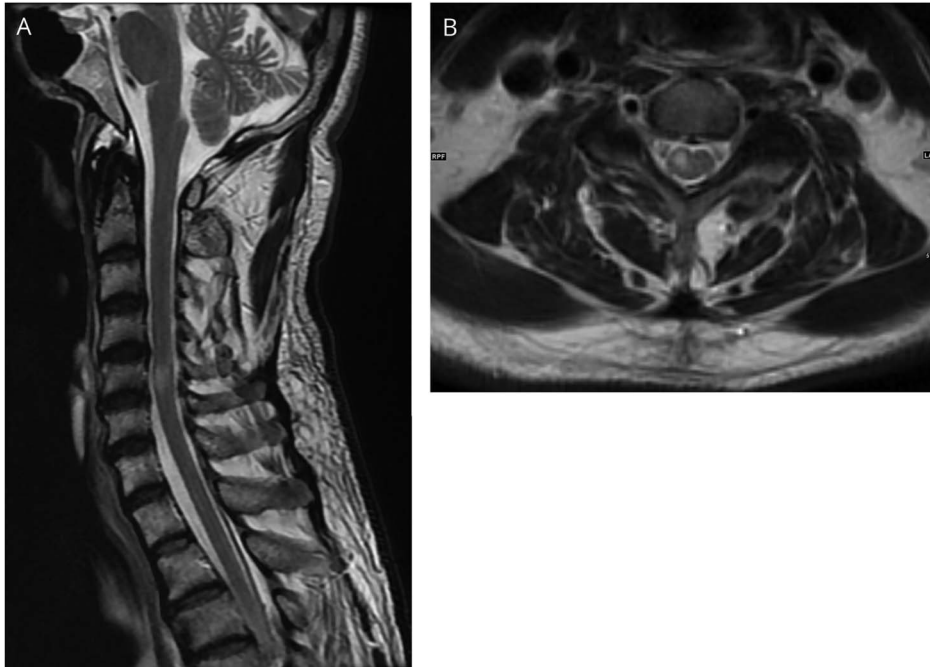
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*Neurology*® 2018;90:e1177-e1178. doi:10.1212/WNL.0000000000005218

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**Figure 1** MRI shows C5 hemicord T2 hyperintensity



T2-weighted MRI sequence (day 3), sagittal (A) and axial (B) sections.

A 59-year-old man with a history of smoking presented with acute right hemiparesis, pain, and temperature loss on the left below T4 and impaired left-sided abdominal reflexes. Proprioception and vibration were normal. MRI (day 3) showed a short segment of T2 hyperintensity at the right half of C5 spinal cord (figure 1); diffusion-weighted MRI (day 5) demonstrated restricted diffusion (figure 2), confirming hemicord infarct. Sulcal artery occlusion presents with incomplete Brown-Sequard syndrome and is uncommon, unlike the more common anterior spinal artery syndrome.<sup>1</sup> It preferentially involves the cervical cord.<sup>2</sup> With physiotherapy, aspirin, and statins, this patient recovered well.

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### Author contributions

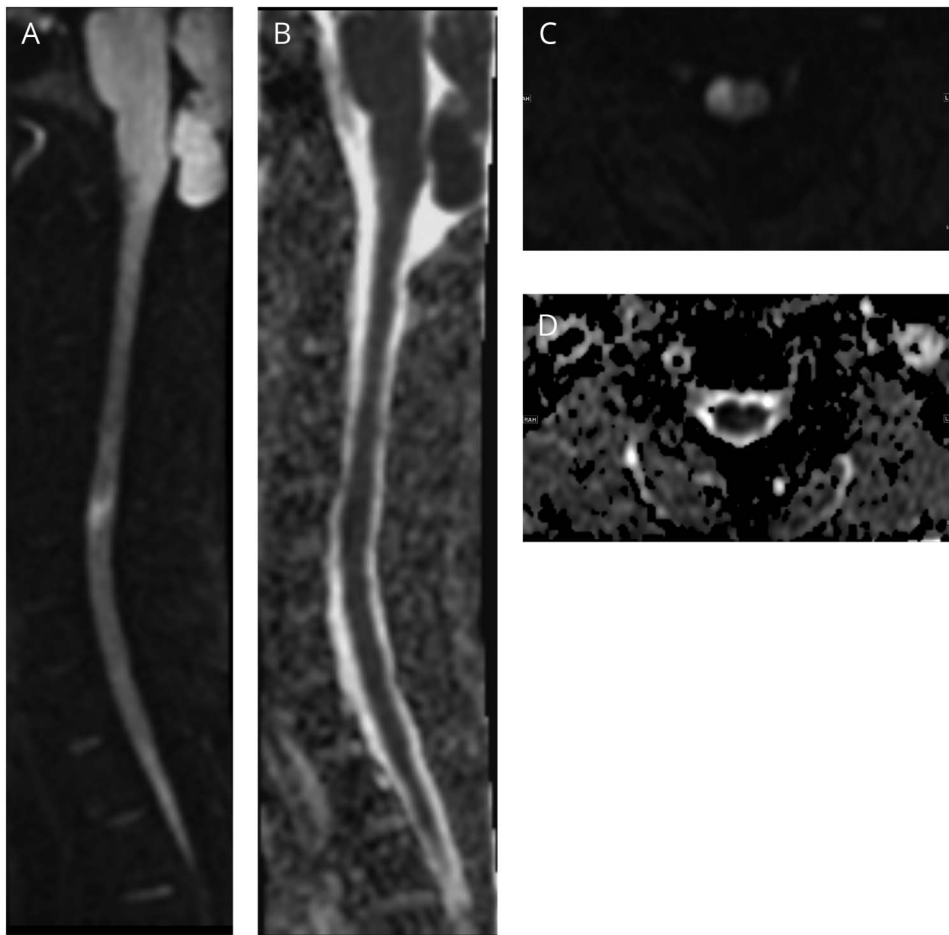
J.M.N. Fong: writing of manuscript. G.J. Ng: writing of manuscript. N.C.K. Tan: study concept and design, critical revision of manuscript.

### Acknowledgment

The authors thank Dr. Yu Wai-Yung (National Neuroscience Institute) for providing the MRI.

From the Division of Medicine (J.M.N.F.), Singapore Health Services; and Department of Neurology (G.J.N. and N.C.K.T.), National Neuroscience Institute, Singapore. Go to [Neurology.org/N](https://Neurology.org/N) for full disclosures. Funding information and disclosures deemed relevant by the authors, if any, are provided at the end of the article.

**Figure 2** MRI shows restricted diffusion



Diffusion-weighted MRI sequence (day 5), diffusion-weighted sagittal (A) and axial (C) and apparent diffusion coefficient sagittal (B) and axial (D) sections.

### Study funding

No targeted funding reported.

### Disclosure

J.M.N. Fong and G.J. Ng report no disclosures relevant to the manuscript. N.C.K. Tan owns stock in Novartis, Pfizer,

and Johnson & Johnson. Go to [Neurology.org/N](http://Neurology.org/N) for full disclosures.

### References

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