Teaching *NeuroImages*: Restricted diffusion “snake eyes appearance” in acute spinal cord ischemia

José Nuno Alves, MSc
Célia Machado, MSc
Mariana Taveira, MSc
João Soares-Fernandes,
MD
Carla Ferreira, MD
João Pinho, MD

Correspondence to
Dr. Alves:
jose.nuno.alves@gmail.com

Figure Cervical spine MRI

(A) Sagittal T2, hyperintense anterior spinal lesion involving C5-C7 levels. (B-D) Axial diffusion-weighted imaging at C3-C4, C6-C7, and Th1-Th2 levels, showing snake eyes appearance with hyperintensity on b1000 (left) and hypointensity on apparent diffusion coefficient map (right) at C6-C7 level (C).

An 81-year-old man presented with sudden-onset, painless flaccid tetraparesis, mild lower limbs hyperreflexia, right extensor plantar reflex, without sensory abnormalities. MRI (7 hours later) revealed a restricted diffusion lesion with “snake eyes appearance” (SEA) in the cervical spinal cord (C5-C7) (figure). Investigation revealed a gastric adenocarcinoma-related prothrombotic state, bilateral vertebral artery origin stenosis, and mild C6-C7 cord compression. SEA in T2-weighted imaging was described in several conditions,¹ but restricted diffusion SEA is highly suggestive of vascular nature. Although a compression-related venous

infarct cannot be excluded,² the underlying mechanism is probably ischemia in the terminal territory of sulcocommissural arteries.

AUTHOR CONTRIBUTIONS

José Nuno Alves: acquisition of data, clinical data review, final manuscript writing. Célia Machado: clinical data review, literature review. Mariana Taveira: clinical data review, literature review. João Soares-Fernandes: acquisition of data, important intellectual contribution. Carla Ferreira: data review, important intellectual contribution. João Pinho: important intellectual contribution, final manuscript writing.

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From the Neurology Department (J.N.A., C.M., C.F., J.P.) and Neuroradiology Department (J.S.-F.), Hospital de Braga; and Internal Medicine Department (M.T.), Hospital de Pedro Hispano, Unidade Local de Saúde de Matosinhos, Portugal.

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DISCLOSURE

The authors report no disclosures relevant to the manuscript. Go to Neurology.org for full disclosures.

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