RESIDENT & FELLOW SECTION

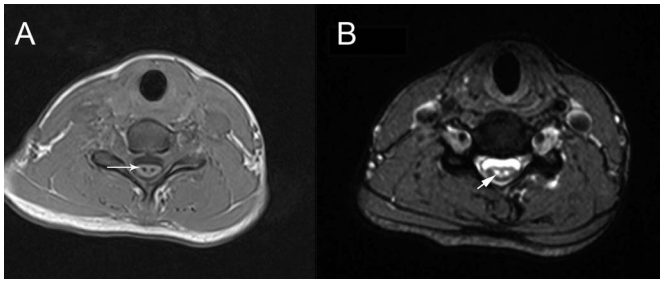
Section Editor
Mitchell S.V. Elkind, MD, MS

Teaching Neuro*Images*: Snake eyes appearance in MRI in patient with ALS

Sushma Sharma, MD
Aditya Murgai, MD
Pradeep Pankajakshan Nair, MD, DM
Ananthakrishnan Ramesh, MD

Correspondence to Dr. Nair: drpradeeppnair17@gmail.com

Figure MRI cervical spine



(A) MRI cervical spine axial T1-weighted sequence shows symmetrical hypointense signals in the anterior horn. (B) MRI cervical spine axial T2-weighted sequence shows symmetrical hyperintense signals in the anterior horn.

A 17-year-old girl presented with 6 months of progressive asymmetrical distal weakness of upper limbs with fasciculation. There were no bulbar symptoms, weakness in lower limbs, or sensory symptoms. There was no history of neck injury or pain. Deep tendon reflexes were all brisk. MRI of cervical spine revealed symmetrical T1 hypointense, T2 hyperintense signal in the anterior horns ("snake eyes" appearance) (figure, A and B) without evidence of extradural compression. EMG showed diffuse denervation changes in both upper and lower limb muscles. Sensory nerve action potentials were normal. A diagnosis of amyotrophic lateral sclerosis (ALS) was made. Snake eyes appearance has been described in disorders like ALS, cervical spondylotic amyotrophy, Hirayama disease, and ossification of posterior longitudinal ligament.[1,2]

AUTHOR CONTRIBUTIONS

Sushma Sharma: data acquisition, drafting of manuscript. Aditya Murgai: data acquisition, drafting of manuscript. Pradeep Pankajakshan Nair: drafting and revising of manuscript, concept of the manuscript. Ananthakrishnan Ramesh: data acquisition and revising of manuscript.

STUDY FUNDING

No targeted funding reported.

DISCLOSURE

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

REFERENCES

1. Friedman DP, Tartaglino LM, Fisher AR, Flanders AE. MR imaging in the diagnosis of intramedullary spinal cord diseases that involve specific neural pathways or vascular territories. AJR Am J Roentgenol 1995;165:515–523.
2. Mizuno J, Nakagawa H, Inoue T, Hashizume Y. Clinicopathological study of "snake-eye appearance" in compressive myelopathy of the cervical spinal cord. J Neurosurg 2003;99(2 suppl):162–168.

Download teaching slides: www.neurology.org

From the Departments of Neurology (S.S., A.M., P.P.N.) and Radiology (A.R.), Jawaharlal Institute of Postgraduate Medical Education and Research, Pondicherry, India.