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"Glass Eel" Sign in Chikungunya Myelopathy

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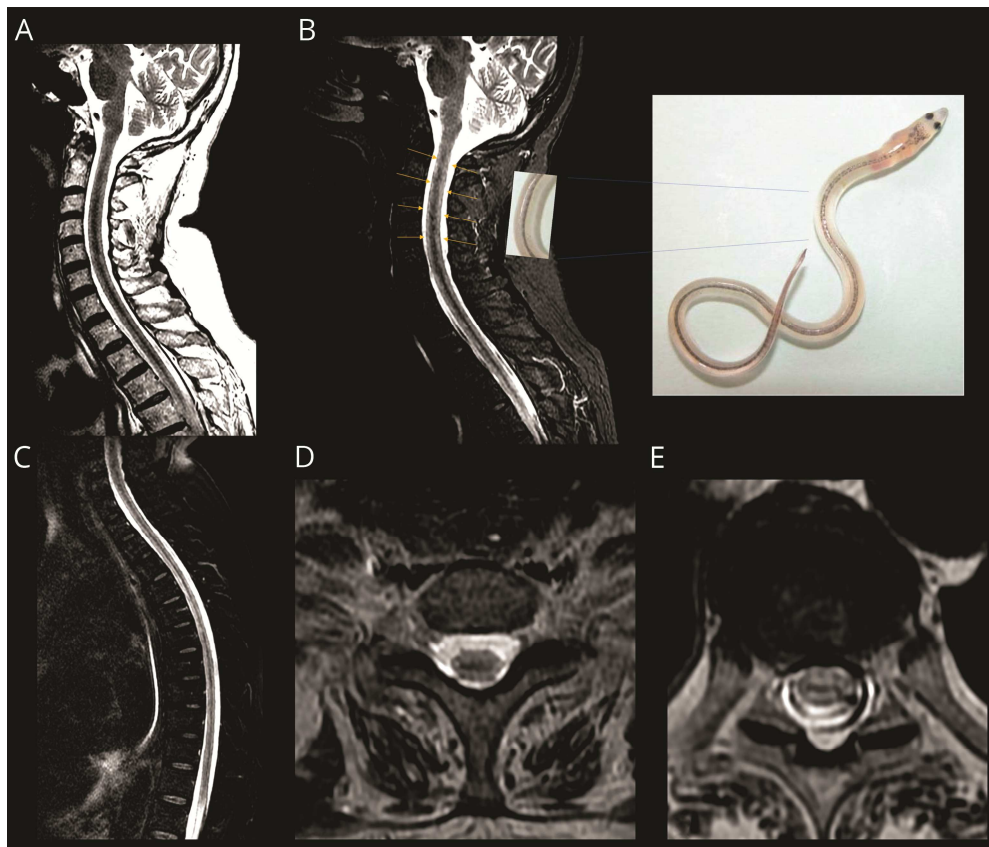
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A 69-year-old female patient presented with acute lower limb weakness and urinary retention progressing to quadriparesis and dyspnea within days. She reported fever, arthralgia, myalgia, and headache for six days before the beginning of neurological symptoms. Neurologic examination showed severe quadriparesis, extensor plantar responses and a cervical sensory level. Magnetic resonance (Figure) revealed longitudinally extensive hypersignal on the peripheral zone of the spinal cord on sagittal T2 images, sparing the central grey matter and resembling a “glass eel”. Cerebrospinal fluid showed 10cells/mm³. Serology was positive for Chikungunya. She was treated with methylprednisolone and plasmapheresis and recovered arm movements after 1 month. A peripheral pattern of longitudinally extensive myelopathy has been reported in Chikungunya¹. Circumferential myelopathy sparing the central gray matter has not been consistently reported in other infectious myelitis². Presence of the virus has been demonstrated in perivascular spaces, which might explain the predominance of lesions along perivascular distributions¹.

Figure 1: Peripheral T2 hyperintensity in Chikungunya myelopathy.

MRI showing longitudinally extensive peripheral hypersignal (arrows) of the entire spinal cord on sagittal T2 (A) and STIR (B and C), resembling a “glass eel” - detail. Axial T2 images at the levels of T1 (D) and T7 (E) showing peripheral hyperintensity sparing the central grey matter.



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