

Spine magnetic resonance imaging with dynamic flexion sequences for evaluation of mini-polymyoclonus

Imagens de ressonância da coluna vertebral com sequências dinâmicas de flexão para avaliação de mini-polimioclonus

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An 18-year-old male presented with a two-year history of bilateral hand tremulousness. Neurological examination revealed weakness in both hands, but predominantly on the right. With arms outstretched, distal mini-polymyoclonus occurred¹. The rest of the neurological examination was unremarkable. Motor and sensory nerve conduction studies were normal. Electromyography showed fibrillations and

fasciculations at rest and signs of mild chronic reinnervation in C8-T1 muscles bilaterally. Spine MRI with dynamic flexion sequences² revealed cervical cord atrophy, forward shifting of the posterior wall of the cervical dural sac, and contrast-enhancement of an enlarged posterior epidural compartment (Figure). This constellation of features suggests Hirayama disease.

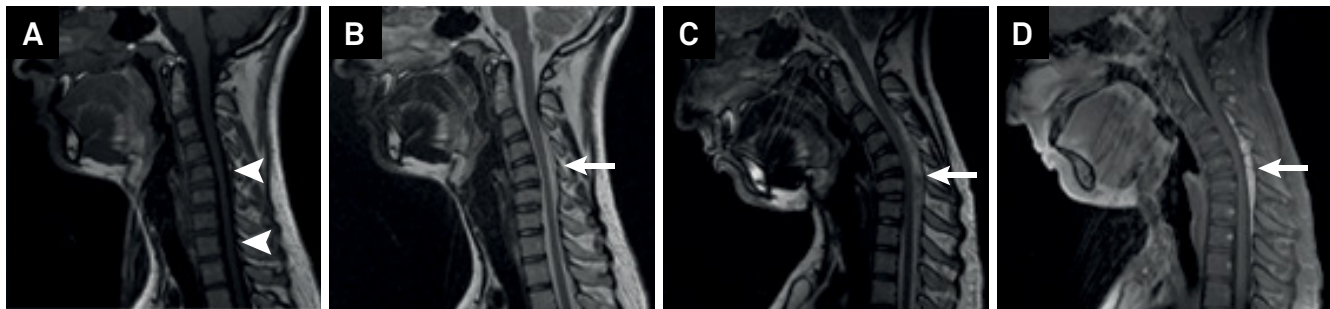


Figure. Neutral cervical spine MRI sagittal images (A and B). In A, a T1-weighted image shows C6-T1 cord atrophy (arrowheads) and in B a T2-weighted image demonstrates slight detachment of the posterior dura mater (arrow). Flexion cervical spine MRI sagittal images (C and D). In C, a T2-weighted image reveals forward displacement of the posterior wall of the dural sac with some impression over the cord (arrow). In D, a contrast-enhanced T1-weighted image shows engorgement of the posterior epidural venous plexus, with enhancement (arrow).

References

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