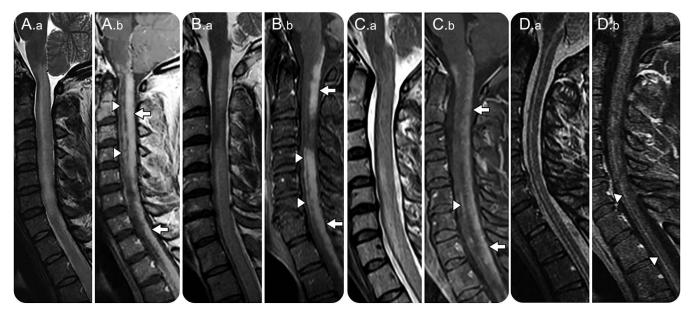
Central canal enhancement and the trident sign in spinal cord sarcoidosis

Figure 1 Sagittal MRI shows central canal enhancement in spinal cord sarcoidosis



MRIs show longitudinally extensive T2 hyperintensity (A.a, B.a, C.a, D.a) with dorsal subpial enhancement (A.b, B.b, C.b; arrows) and central canal enhancement (A.b, B.b, C.b, D.b; arrowheads).

We report an enhancement pattern in 9 patients with spinal cord sarcoidosis (SCS) with subacute onset (<4 weeks) myelitis as the initial manifestation of sarcoidosis. Presenting symptoms included numbness in 9, urinary complaints in 7, and weakness in 6. Examination revealed abnormal proprioception in 8, spastic quadriparesis/paraparesis in 6, and sensory level in 6. MRI showed central canal enhancement alone (11%) or in combination with dorsal-subpial enhancement (89%) (figure 1), often resembling a trident head on axial sequences (figure 2). Lung biopsies in 7 patients confirmed sarcoidosis; both patients without biopsies had hilar adenopathy. Central canal enhancement and the trident sign in subacute myelitis should raise suspicion for SCS.

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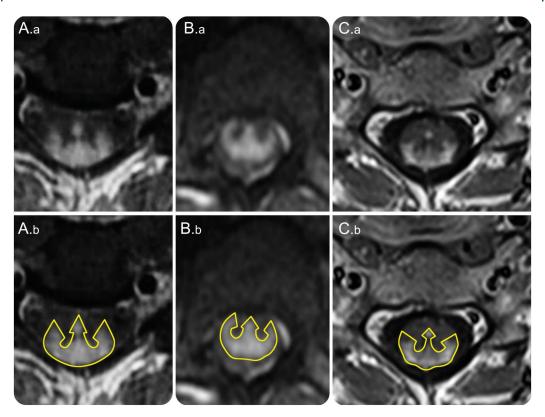
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Figure 2 Axial postgadolinium images highlight the trident sign



Crescent-shaped layering of posterior subpial enhancement accompanied by central canal enhancement led to a 3-pronged appearance (A.a, B.a, C.a) resembling a trident head (A.b, B.b, C.b).

 Flanagan EP, Kaufmann TJ, Krecke KN, et al. Discriminating long myelitis of neuromyelitis optica from sarcoidosis. Ann Neurol 2016;79:437–447.

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