Central canal enhancement and the trident sign in spinal cord sarcoidosis

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 quadripareisis/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.

Nicholas L. Zalewski, MD, Karl N. Krecke, MD, Brian G. Weinshenker, MD, Allen J. Aksamit, MD, Brittani L. Conway, MD, Andrew McKeon, MD, Eoin P. Flanagan, MBBCb

From the Mayo Clinic, Rochester, MN.


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Correspondence to E.P. Flanagan: flanagan.eoin@mayo.edu
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).

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