

Teaching NeuroImage: Intradural ALK-Positive Histiocytosis With Involvement of Nerve Roots and Spinal Dura

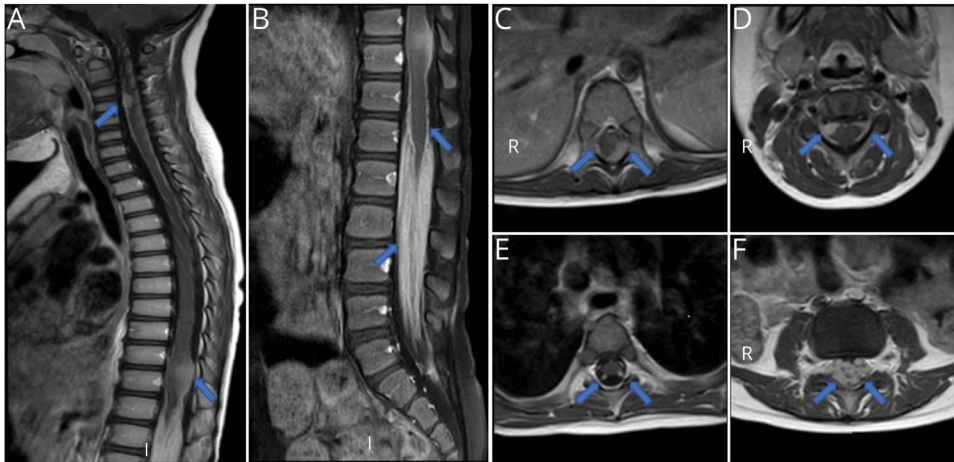
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Figure Representative MRI Findings



(A, B) Postcontrast T1W images revealed an obviously enhanced intradural extramedullary mass between T10-11 (C) with multiple and diffuse enhancement of thickened nerve roots and spinal dura. (D) Nodular-like enhancement lesion centered at the C4 neuroforamen. (E, F) Extensive abnormal enhancement of thoracic and lumbar nerve roots, especially the cauda equina.

A 3-year-old boy presented with progressive lower extremity weakness and difficulty walking for 2 months. Neurologic examination found the muscle strength of his left lower limb was grade 3 and tendon reflex was weakened. MRI demonstrated an intradural extramedullary mass between T10-11 with multiple and diffuse enhancement of thickened nerve roots and spinal dura (Figure). Juvenile xanthogranuloma was suspected as positive staining for CD68 and negative for S100 and CD1a, while immunoreactivity for ALK did not support it. The genetic test confirmed the diagnosis of ALK-positive histiocytosis with KIF5B-ALK fusion, which is a relatively new subtype of histiocytic disease.^{1,2}

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Disclosure

The authors report no disclosures relevant to the manuscript. Go to [Neurology.org/N](https://www.neurology.org/N) for full disclosures.

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Huanyu Luo, MM	Department of Radiology, Beijing Children's Hospital, Capital Medical University, National Center for Children's Health	Drafting/revision of the manuscript for content, including medical writing for content
Yun Peng, MD, PhD	Department of Radiology, Beijing Children's Hospital, Capital Medical University, National Center for Children's Health	Study concept or design; other

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