A 10-year-old girl presented with subacute lower limb weakness and gait ataxia. MRI revealed a large multicystic spinal cord lesion with patchy enhancement (figure 1, A and B) and 3 small (<6 mm) periventricular and deep white matter brain lesions. The presence of serum anti-aquaporin-4 (AQP4) immunoglobulin G (ELISA assay) and compatible neuropathologic features from neurosurgical specimens (figure 2) suggested the diagnosis of a neuro-myelitis optica spectrum disorder. Targeted immunotherapy was started, with partial lesion resolution (figure 1C).

This case provides neuroradiologic evidence for macroscopic multicystic cord demyelination in AQP4-related disorders and highlights the role of inflammatory etiologies in childhood spinal cord disease.

Giulia Longoni, MD, Sandra Bigi, MD, Helen M. Branson, MD, Cynthia Hawkins, MD, James T. Rutka, MD, PhD, Massimo Filippi, MD, E. Ann Yeh, MD


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Correspondence to Dr. Yeh: ann.yeh@sickkids.ca

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**Figure 2 Spinal cord biopsy**

Hematoxylin & eosin/Luxol fast blue (LFB) stained section from the spinal cord biopsy demonstrates sheets of macrophages (arrows) containing LFB-positive debris and scattered reactive astrocytes (arrowheads) suggestive of an active demyelinating process (200×).

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