

**Reply:**

The authors of the letter had 3 main concerns regarding our article.<sup>1</sup> They first questioned our use of brain MR imaging and gadolinium contrast. When neurologic symptoms are present, our standard protocol includes administration of contrast material. All of the patients in our study had neurologic symptoms suggesting intracranial pathology; thus, they received brain imaging. The authors of the letter do not include imaging in their diagnostic criteria and believe that the disease is diagnosed by clinical symptoms, electrophysiology, and CSF abnormalities. Why then do they not criticize our use of spine imaging? Other authors disagree with them because in children, nonimaging findings may be confusing due to the nonspecific clinical presentation, thus resulting in delayed diagnosis and even death.<sup>2</sup> CSF and electromyography findings lag behind the clinical symptoms, thus supporting the usefulness of noninvasive techniques like MR imaging in children with suspected Guillain-Barré syndrome (GBS).<sup>3-5</sup> Furthermore, gadolinium-enhanced spine MR imaging is comparable with the criterion standard nerve conduction studies and may play a crucial role in the diagnosis of GBS, especially when specialist neurophysiology expertise is unavailable.<sup>6</sup>

The second question raised by the authors of the letter was whether the enhancement indicated prognosis. Because our article is retrospective in nature, it was not meant to indicate prognosis. The authors of the letter answered their own question by indicating that there are multiple factors involved in the prognosis.

The third question raised was the effectiveness of enhancement in separating chronic inflammatory demyelinating neuropathy from

GBS. The authors themselves have indicated that enhancement is seen in both diseases. They believe that timing of the scan is important. Again, this is a retrospective study in which timing could not be controlled. The letter writers do not give their source of information as to why they think timing is important.

**References**

1. Zuccoli G, Panigrahy A, Bailey A, et al. **Redefining the Guillain-Barré spectrum in children: neuroimaging findings of cranial nerve involvement.** *AJNR Am J Neuroradiol* 2011 Feb 3. [Epub ahead of print]
2. Roodbol J, de Wit MC, Walgaard C, et al. **Recognizing Guillain-Barré syndrome in preschool children.** *Neurology* 2011 1;76:807-10
3. Korinthenberg R, Schessl J, Kirschner J. **Clinical presentation and course of childhood Guillain-Barré syndrome: a prospective multicentre study.** *Neuropediatrics* 2007;38:10-17
4. Rabie M, Nevo Y. **Childhood acute and chronic immune-mediated polyradiculoneuropathies.** *Eur J Paediatr Neurol* 2009;13:209-18. Epub 2008 Jun 26
5. van Doorn PA, Ruts L, Jacobs BC. **Clinical features, pathogenesis, and treatment of Guillain-Barré syndrome.** *Lancet Neurol* 2008;7:939-50
6. Smith N, Pereira J, Grattan-Smith PJ. **Investigation of suspected Guillain-Barré syndrome in childhood: what is the role for gadolinium-enhanced magnetic resonance imaging of the spine?** *Paediatr Child Health* 2010 Jul 2. [Epub ahead of print]

G. Zuccoli  
A. Panigrahy  
A. Bailey  
C. Fitz

*Children's Hospital of Pittsburgh  
University of Pittsburgh Medical Center  
Pittsburgh, Pennsylvania*

DOI 10.3174/ajnr.A2642