



**WHIPLASH SHAKEN-BABY SYNDROME WITH SCIWORA**

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C O M M E N T S

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Too often patients cannot avoid their neurological disease or disorder, and medical or neurosurgical treatment may not always offer the hope of a cure. It is no surprise, then, that practitioners in the neurosciences are eager to help prevent unnecessary injury caused by neurological trauma. The case reported by Sana and coworkers represents a particularly disturbing example of avoidable traumatic injury: shaken-baby syndrome. Despite this infant's obvious clinical symptoms, x-rays and computed tomographic (CT) scans showed no evidence of the intracerebral, subdural, or retinal hemorrhage typical of this syndrome. Magnetic resonance (MR) imaging, however, showed abnormalities localized to the cervical spinal cord.

This case exemplifies several important points. First, children with neurological symptoms and no external injuries whose x-rays and CTs appear normal should undergo MR imaging to rule out the possibility of unreported traumatic injury. Furthermore, in such cases, clinicians need to maintain a high level of suspicion for child abuse. With the almost 400% increase in the incidence of SCIWORA (spinal cord injury without radiographic abnormality) in the last two decades, clinical vigilance must remain high to insure early detection and appropriate treatment, and, perhaps, to prevent recurrences. Finally, the findings on MR imaging in this case reinforce the point that the term SCIWORA has become a misnomer: Soft-tissue injuries that do not appear on x-rays and CTs are readily apparent on MR imaging. The term predates the widespread availability of MR imaging and may need to be retired in much the same way that 'occult' cerebral vascular malformation is no longer used to describe a cavernous malformation (ah, but I date myself!).

In another unusual case, imaging showed a brightly enhancing mass in an 83-year-old woman. Such findings in the elderly usually are diagnostic of metastatic disease and prognostic of a poor outcome. Happily, in this patient, the diagnosis was a rare cerebellar hemangioblastoma, which was resected, and the patient's postoperative course was benign. Readers will also find a report of the first auditory brainstem implant performed at our institution. This technology holds great promise for restoring meaningful hearing in appropriately selected candidates, and Barrow is pleased to be offering this state-of-the-art technology. All of these patients received the outstanding care for which Barrow is known, and an integral part of that care is specialized neuroscience nursing. The article on positioning patients with neurological conditions will serve as an excellent reference for all involved in the care of this complex patient population.

We hope that you enjoy these articles and will consider using the enclosed self-addressed stamped envelope to make a tax-deductible donation that will help us continue to share our unusual clinical findings with the medical community. Thank you.

*Robert F. Spetzler, MD*  
*Editor-in-Chief*



This issue's cover depicts one mechanism of injury when an infant is shaken violently. The incompletely ossified vertebrae in an infant allow a greater range of motion and damage to the spinal cord and nerve rootlets. See the article by Sana et al. on page 4. The illustration is by Mark Schornak and Michael Hickman. The concept for the art is based on a drawing by Steve Harrison.