Does the timing of surgery to treat traumatic spinal cord injury affect outcomes?

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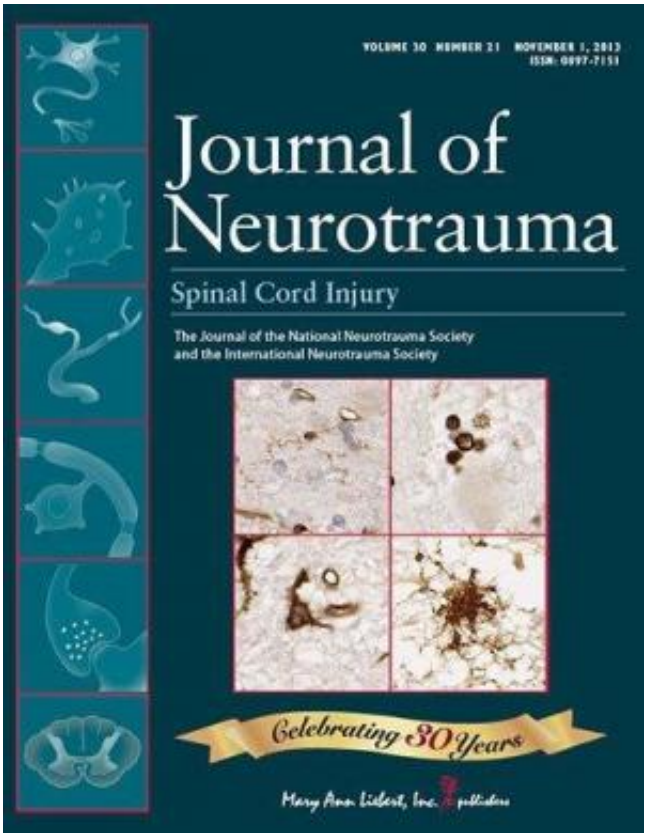

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Performing surgery to take pressure off the spine after a traumatic injury soon after the event could prevent or reverse some of the secondary damage caused by swelling and decreased blood flow to the injured spine. However, strong evidence to support early spinal surgery

is lacking, mainly because the available study data cannot be easily compared, as explained in a review of this controversial field published in *Journal of Neurotrauma*.

Joost van Middendorp, Allard Hosman, and Suhail Doi, Stoke Mandeville Hospital (Aylesbury, UK), University of Oxford, UK, University of Queensland (Brisbane, Australia), and Radboud University Nijmegen Medical Center (the Netherlands), performed a systematic review of the literature on spinal decompression surgery following traumatic spinal cord injury (SCI).

Although debate continues over the effects of the timing of surgery, the authors found that "early" compared to "late" spinal surgery was associated with significantly greater motor and neurological improvement and shorter length of hospital stay. As the authors report, though, the evidence supporting early spinal surgery "lack robustness" due to various sources of bias within the studies and heterogeneity within and between the studies. For example, the studies being compared include patients with various severities and levels of spinal cord injuries.

They report their findings in "The Effects of the Timing of Spinal Surgery after Traumatic Spinal Cord Injury: A Systematic Review and Meta-Analysis."

"This timely article contributes additional data and discussion to the general topic of decompression surgery as an effective strategy to protect against traumatic SCI," says W. Dalton Dietrich, III, PhD, Deputy Editor of *Journal of Neurotrauma* and Kinetic Concepts Distinguished Chair in Neurosurgery, Professor of Neurological Surgery, Neurology and Cell Biology, University of Miami Leonard M. Miller School of Medicine. "This well done meta-analysis of published data should therefore be of great interest to the readership of the Journal, including spinal surgeons."

More information: The article is available on the *Journal of Neurotrauma* website.

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