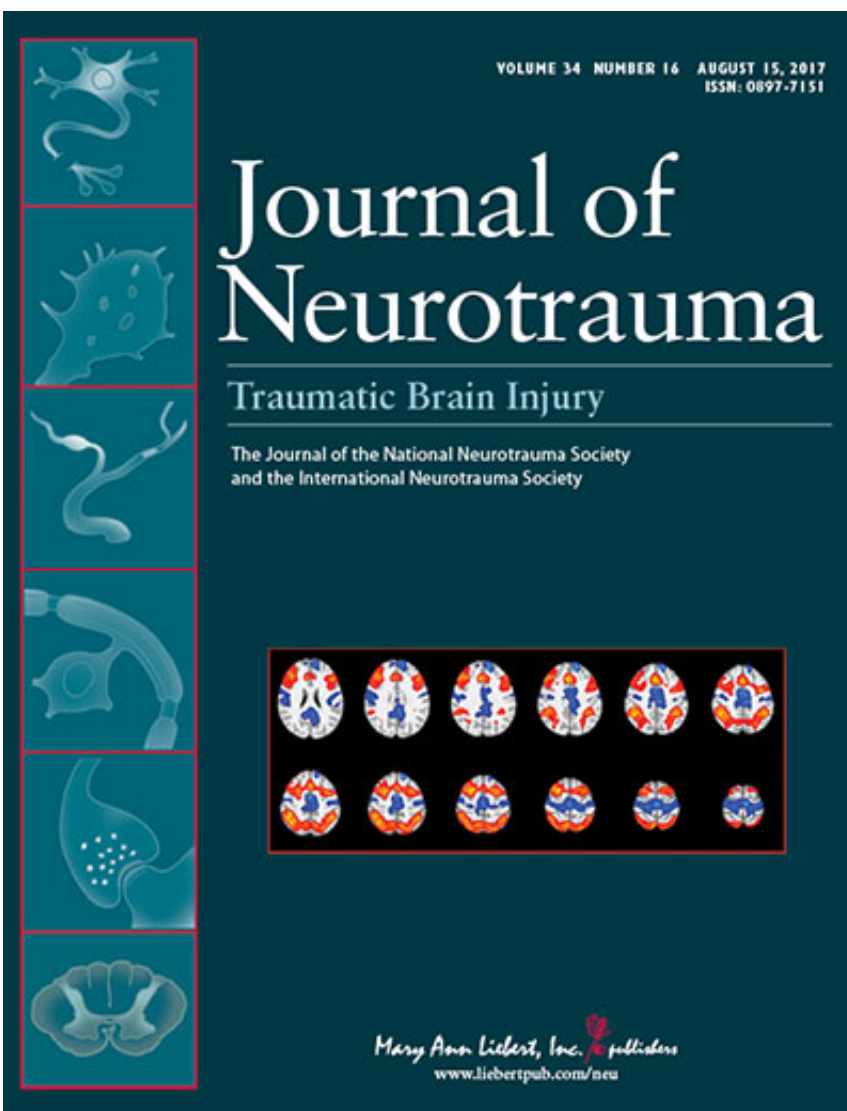


Does intracranial pressure monitoring improve outcomes in severe traumatic brain injury?

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A new study has shown that use of intracranial pressure (ICP) monitoring in patients with severe traumatic brain injury (TBI) was associated with a significant decrease in mortality, but it did not improve the rate of favorable outcomes. Although ICP monitoring was linked to more aggressive therapy, the researchers concluded that current therapies cannot adequately control increased ICP, as reported in *Journal of Neurotrauma*.

Eiichi Suehiro, MD, PhD, Yuichi Fujiyama, MD, Hiroyasu Koizumi, MD, PhD, and Michiyasu Suzuki, MD, PhD, from Yamaguchi University School of Medicine, Ube, Japan and representing The Japan Neurotrauma Data Bank Committee of The Japan Society of Neurotraumatology, Tokyo, coauthored the article entitled "Directions for Use of Intracranial Pressure Monitoring in Treatment of Severe Traumatic Brain Injury Using Data from the Japan Neurotrauma Data Bank."

In a retrospective study of nearly 1,100 [patients](#) with severe TBI, the researchers reported a rate of ICP monitoring of only 28%, suggesting that use of this method has declined compared to previous studies. The patients who received ICP monitoring had significantly higher rates of therapy with hyperventilation, hyperosmolar diuretics, sedatives, anticonvulsants, and surgery, and more intensive body temperature management. Yet there was no significant difference in the favorable outcome rate between the ICP and non-ICP monitoring groups of patients.

"This well-reasoned retrospective analysis focuses on an issue that continues to generate controversy in relation to the care and management of traumatically brain injured patients," says John T. Povlishock, PhD, Editor-in-Chief of *Journal of Neurotrauma* and Professor, Medical

College of Virginia Campus of Virginia Commonwealth University, Richmond. "What is of note in this communication is the fact that although those patients were aggressively managed, with concomitant ICP monitoring revealing a significant reduction in mortality, this occurred without any improvement in outcome, a finding that further highlights the continued controversy surrounding routine ICP [monitoring](#)."

More information: Eiichi Suehiro et al, Directions for Use of Intracranial Pressure Monitoring in the Treatment of Severe Traumatic Brain Injury Using Data from The Japan Neurotrauma Data Bank, *Journal of Neurotrauma* (2017). [DOI: 10.1089/neu.2016.4948](https://doi.org/10.1089/neu.2016.4948)

Provided by Mary Ann Liebert, Inc

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