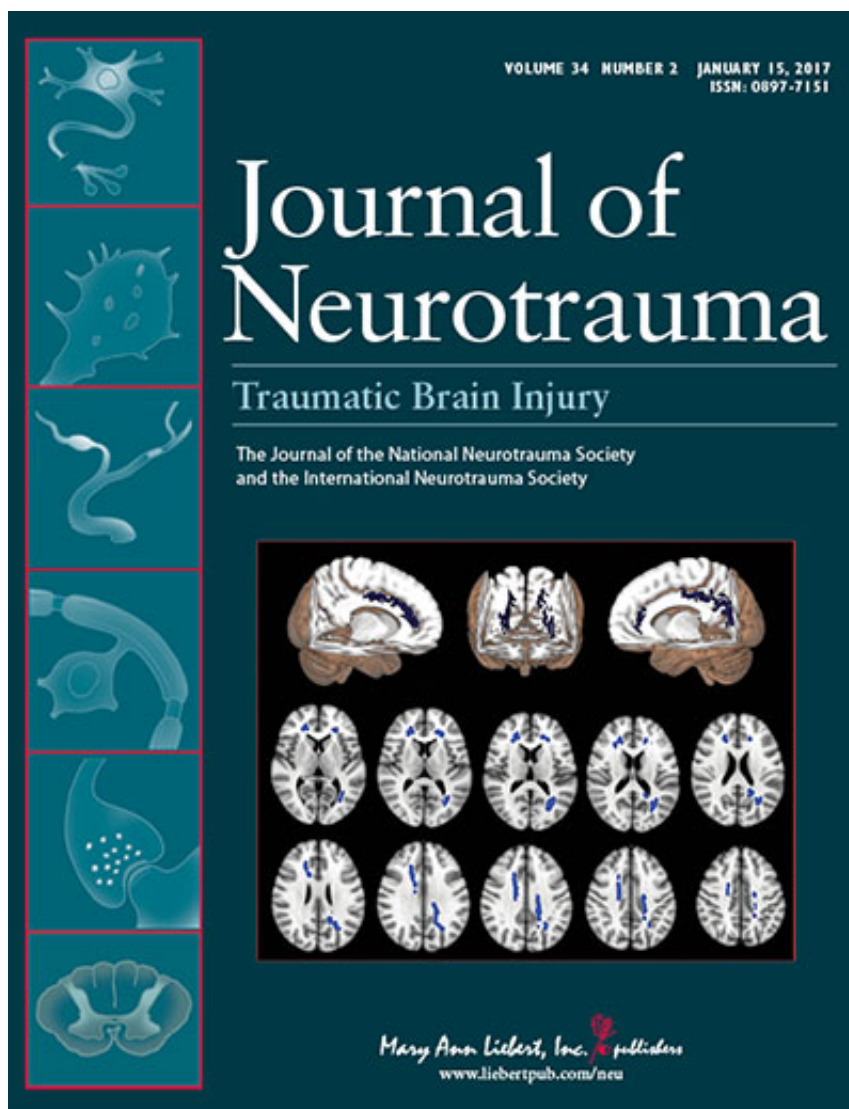


New study shows GFAP and UCH-L1 are not useful biomarkers for diagnosing mild traumatic brain injury

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In patients who suffered acute orthopedic injuries, two proposed biomarkers for mild traumatic brain injury (mTBI) were not able to distinguish between patients who did or did not have mTBI. Relying on elevated levels of the proteins GFAP and UCH-L1 to identify patients with mTBI could lead to false-positive diagnoses and unnecessary brain imaging, as reported in an article in *Journal of Neurotrauma*.

Jussi Posti, MD, PhD and coauthors from Turku University Hospital and University of Turku (Finland), VTT Technical Research Centre of Finland (Tampere), and University of Cambridge, Addenbrooke's Hospital (U.K.), measured the levels of glial fibrillary acidic protein (GFAP) and ubiquitin C-terminal hydrolase-L1 (UCH-L1) in patients at several time points after acute orthopedic injuries. The researchers compared the levels to those in [patients](#) with computed tomography (CT)-negative mTBI. They report the results in the article entitled "Glial Fibrillary Acidic Protein and Ubiquitin C-Terminal Hydrolase-L1 Are Not Specific Biomarkers for Mild CT-Negative Traumatic Brain Injury."

"This study represents another important contribution to the field of biomarker discovery within the context of mild traumatic [brain injury](#)," says John T. Povlishock, PhD, Editor-in-Chief of *Journal of Neurotrauma*. "Although as noted by the authors, this study used platforms and assays different from previous reports in the literature, the fundamental fact remains that this study's findings emphasize the need for increased vigilance when using GFAP and UCH-L-1 as potential biomarkers of mild [traumatic brain injury](#) in a patient population that has sustained concomitant orthopedic injury."

More information: Jussi P. Posti et al, Glial Fibrillary Acidic Protein and Ubiquitin C-Terminal Hydrolase-L1 Are Not Specific Biomarkers

for Mild CT-Negative Traumatic Brain Injury, *Journal of Neurotrauma* (2017). [DOI: 10.1089/neu.2016.4442](https://doi.org/10.1089/neu.2016.4442)

Provided by Mary Ann Liebert, Inc

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