

Current models for predicting outcomes after mild traumatic brain injury perform poorly

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For the 5-15% of patients with mild traumatic brain injury (mTBI) who will have lingering physical, behavioral, or cognitive problems 3 to 6 months after their injury, identification of this at-risk population is essential for early intervention. Existing models used to predict poor outcomes after mTBI are unsatisfactory, according to a new study, and new, more relevant predictive factors are different than those used in cases of moderate or severe TBI, as described in the study published in *Journal of Neurotrauma*, a peer-reviewed journal from Mary Ann Liebert, Inc., publishers.

Hester F. Lingsma and a multidisciplinary, international team of authors evaluated two existing prognostic models for mTBI in patients selected from the TRACK-TBI Pilot observational study carried out at three medical centers in the U.S. Both models performed poorly. Based on further analysis, the authors identified older age, pre-existing psychiatric conditions, and less education as the three strongest predictors of poor outcomes, as they report in the article "Outcome Prediction after Mild and Complicated Mild Traumatic Brain Injury: External Validation of Existing Models and Identification of New Predictors Using the TRACK-TBI Pilot Study."

John T. Povlishock, PhD, Editor-in-Chief of *Journal of Neurotrauma* and Professor, Medical College of Virginia Campus of Virginia Commonwealth University, Richmond, notes that, "this is an extremely important study utilizing the TRACK-TBI database. This meticulously performed investigation highlights the dangers in assessing outcome

following mTBI, emphasizing that other comorbid factors such as older age, preexisting psychiatric disorders, and less education, perhaps a function of socioeconomic status, can negatively impact outcome. This important communication should be considered routinely as we move forward in our assessments of outcomes following mTBI, whether or not these outcomes are framed in the context of advanced imaging, biomarker evaluation, and/or other metabolic/functional screens."

More information: [online.liebertpub.com/doi/pdf/...
0.1089/neu.2014.3384](https://online.liebertpub.com/doi/pdf/10.1089/neu.2014.3384)

Provided by Mary Ann Liebert, Inc

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