

Abstract
Paper Sessions

Neurological and Neuropsychiatric Disorders: Traumatic Brain Injury & Other

A - 11

The Contribution of Psychological Stress to Adolescent Post-Concussive Symptoms Across Recovery

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Objective: The aim of this study was to explore whether less commonly explored injury factors account for variance in post-concussive symptoms across recovery. **Method:** Participants aged 12–18 ($n = 440$) who reported to clinic within 14 days of concussion sustained in either sport injury, MVA, fall, or hit were selected from the ConTex registry. A PCS log, PHQ-8, and GAD-7 were completed at initial visit and 3-month follow-up. Separate hierarchical linear regressions determined predictors of PCS scores at both time points. Demographic, premorbid, injury, and psychological factors were entered in Step 1–4, respectively. A sample subset completed the PTSD Checklist (PCL-5) at initial ($n = 58$) and 3-month visits ($n = 27$). Exploratory analyses added the PCL-5 to determine whether post-traumatic stress symptoms contributed to the model. **Results:** At initial visit, sex, post-traumatic amnesia (PTA), PHQ-8, and GAD-7 significantly predicted PCS total scores ($p < .001$), accounting for 43% of the variance. At 3-month follow-up, PTA dropped out of the model, and psychiatric history and mechanism of injury became significant, explaining an additional 15% of the variance in PCS scores ($R^2 = .58, p < .001$). In exploratory analyses, when PCL-5 scores were added to the final models, demographic, premorbid, and injury factors did not remain significant, and the PCL-5 significantly contributed to the variance in PCS scores at both initial ($p = .01$) and 3-month follow-up ($p < .001$). **Conclusions:** Psychological stress and context of injury may be strong predictors of PCS in addition to demographic and premorbid factors. These findings warrant continued investigation of less explored injury factors contribution to initial mTBI presentation and recovery.