Abstract

Posters

DEVELOPMENTAL AND PEDIATRIC: OTHER

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Recovery in Elementary-Age Children at Three Months Post-Concussion

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Objective: Inclusion of broad age ranges in most pediatric concussion studies limits understanding of recovery in elementary-age children. This study's aim was to investigate the most commonly reported symptoms at 3-months post-concussion in children age 6–10 and determine if factors from initial clinic visit predict prolonged recovery. Methods: Participants (n = 73) age 6–10 who reported to clinic within 30 days of concussion (M = 10.4, SD = 7.8 days) were selected from the North Texas Concussion Registry (ConTex). Chi-square and independent t-test were used to examine symptoms at 3 months. Participants were then divided into early (14 days post-injury, n = 29) and late (1 month post-injury, n = 35) recovery groups based on days to symptom resolution. Logistic regression was used to identify significant predictors for prolonged recovery. Variables considered for the final model included sex, ethnicity, presence of LD/ADHD, mechanism of injury, and initial post-concussive symptoms. Results: For the late recovery group, total symptom score at 3 months was 8.3/132 (SD = 14.8, Range = 0–61). The most common symptoms were heightened emotionality (34.3%), headache (31%), and noise sensitivity (31%). The final logistic regression model (2 = 15.7(3), p = .003) included mechanism of injury and initial emotional symptoms as significant predictors for prolonged recovery. For every 1-point (out of 5) increase in emotional symptoms, participants were 1.4x more likely to be in the late recovery group. Concussions sustained by hit or fall were 6x more common in the late recovery group (p = .006). Conclusions: Similar to adolescents, emotional symptoms play a role in predicting delayed recovery in elementary-age children. Mechanism of concussion may also impact recovery.