

Postconcussive syndrome after mild traumatic brain injury epidemiology

The prevalence of postconcussion syndrome (PCS) in the first weeks after mild traumatic brain injury varies from 40% to 80%. However, as many as 50% of patients report symptoms for up to 3 months and 10% to 15% for more than a year ¹⁾.

Persistent PCS, as currently defined, is not specific to mTBI. These data suggest that somatic and cognitive symptoms are most likely to be able to distinguish PCS after mTBI from that present in the general population ²⁾.

Cohort studies and analysis show that women are at greater risk for persistent PCS ^{3) 4) 5) 6)}.

Less than 10% of patients with MTBI had PCS after 6 months' following trauma ⁷⁾.

Data on [epidemiology](#) and prognosticators of persistent post-concussion syndrome (PPCS) after [mild traumatic brain injury](#) (mTBI) in the pediatric population is scarce. The aim of a study of Fried et al. was to evaluate the [prevalence](#) of PPCS in children after mTBI and to identify clinical variables in children who are at high risk for developing PPCS. A multicenter, retrospective matched cohort in which PPCS symptoms were evaluated in children 8-15-year-old, 6-60 months after being admitted to the emergency department because of mTBI. The control group included children admitted to the emergency department because of uncomplicated distal radius fractures. The children's guardians were interviewed for the presence of PPCS symptoms using the "Rivermead Post-Concussion Questionnaire". A multivariable logistic regression model was used to identify predictors of PPCS. Two-hundred and five children were included in the mTBI group and 205 in the control. The median time from the injury was 33.5 months in the mTBI group and 33.8 in the control. The prevalence of PPCS in the mTBI group was 25.3% and PPCS like symptoms in the control was 2.4%, $p < 0.001$. Within the 6-60 months period, the PPCS prevalence was not influenced by the time that elapsed from the injury. In the mTBI group, motor vehicle accidents and adolescence were found to be risk factors for PPCS. PPCS is underdiagnosed in the pediatric population and 25% of children admitted to the ED due to mTBI may suffer from PPCS. Screening guidelines should be implemented to identify and properly treat these children ⁸⁾.

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