

#### References.

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2. American Academy of Pediatrics. Rotavirus infections. In: Pickering LK, ed. Red Book: 2012 Report of the Committee on Infectious Diseases. 29th ed. Elk Grove Village, IL: AAP; 2012:626-29.

## TRAUMATIC DISORDERS

### CONCUSSION SEVERITY AND SYMPTOM RESOLUTION

Investigators at University of Colorado conducted a prospective longitudinal cohort study of children 8 to 18 years old presenting to the ED <6 hours after concussion. Of 234 subjects enrolled, 179 (76%) completed follow-up, and 38 (21%) experienced delayed symptom resolution (DSR). DSR was defined as 3 or more symptoms 1 month after injury that were absent in the week before injury. Initial symptom severity was not significantly associated with DSR 1 month after concussion but was associated with post-concussion syndrome (PCS). A total of 22 (12%) subjects had PCS. Patients were considered to have PCS if they reported 3 or more symptoms on the Concussion Symptom Inventory that aligned with PCS ICD-10 criteria. These 8 include headache, dizziness, fatigue, irritability, impaired concentration for mental tasks, impaired memory, insomnia, and reduced tolerance to stress, excitement, or alcohol. Three of 6 of the most characteristic symptoms of DSR were also most characteristic of early symptom resolution. Cognitive symptoms were more characteristic of subjects reporting DSR and warrant particular attention in future study. Follow-up is recommended for all patients after ED evaluation of concussion to monitor for DSR. (Grubenhoff JA, Deakyne SJ, Brou L, Bajaj L, Comstock D, Kirkwood MW. Acute concussion symptom severity and delayed symptom resolution. **Pediatrics** 2014 Jul;134(1):54-62).

COMMENTARY. This study shows an inability to predict the resolution or persistence of post-concussive symptoms at the time of injury and ED visit. Follow-up and serial symptom assessment are essential for optimal concussion management in children.

#### **Health-related quality of life following concussion.**

Comparison of pre-injury health-related quality-of-life (HRQoL) of children who have sustained mild traumatic brain injury (mTBI), children with mild non-brain injuries, and uninjured children showed that HRQoL of children with mTBI was not significantly different between pre- and post-injury at 1, 3, 6 and 12 months post-injury. Therefore, children who sustain mTBI and have significantly lower HRQoL within the first year post-injury merit further evaluation [1].

#### References.

1. Pieper P, Garvan C. Brain Inj. 2014;28(1):105-13.