Clinical Poster #1

MANAGEMENT OF PEDIATRIC MILD TRAUMATIC BRAIN INJURIES: EMERGENCY DEPARTMENT OBSERVATION OR IN-PATIENT ADMISSION?
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Introduction: Mild traumatic brain injury (mTBI) or concussion injury is a complex brain injury that results in nearly 3 million people seeking emergency attention or an office based visit annually in the United States. Management of concussion therapy is debated nationwide. Management of mTBI in the adult arena has been evaluated and guidelines are generally standard across the trauma community. However, identifying children at risk for clinically important brain injury after a minor head trauma continues to vary among trauma centers and providers alike. There is more variability surrounding the clinical decision to observe children with mild traumatic brain injury in the Emergency Department (ED) or admit for a period of neurologic monitoring given the efforts to reduce the use of computed tomography in the pediatric patient. The variability in the health care providers’ training, expertise and experience can lead to inconsistency in diagnosis and management of concussion injuries. Research has identified large gaps in the knowledge of concussion guidelines and implementation. This project evaluated the evidence in determining the best practice for the initial management of MTBI in the pediatric population. Research was performed using the “One Search” and “Interlibrary Loan” databases.

Purpose: The aim of this project is to attempt to answer the question in the absence of radiographic imaging and in order rule out clinically important brain injury, should we observe this population of patients in the ED or admit them for a period of observation?

Conclusion: After review of the available evidence, it can be generally accepted that children in the absence of predictive symptoms of traumatic brain injury, can be safely observed in the ED for a period of at least 6 hours.