

Title:

Managing Mild Traumatic Brain Injury Recovery

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Session Title:

Rising Stars of Research and Scholarship Invited Student Poster Session 1

Keywords:

Cognitive Rest, Concussion and Mild Traumatic Brain Injury

References:

Arbogast, K. B., McGinley, A. D., Master, C. L., Grady, M. F., Robinson, R. L., & Zonfrillo, M. R. (2013). Cognitive Rest and School-Based Recommendations Following Pediatric Concussion The Need for Primary Care Support Tools. *Clinical pediatrics*, 0009922813478160. Roscigno, C. I., & Swanson, K. M. (2011). Parents' experiences following children's moderate to severe traumatic brain injury: A clash of cultures. *Qualitative health research*, 1049732311410988. Rollins, J. A. (2013). Pediatric traumatic brain injury: A brief look at the parent perspective. *Pediatric nursing*, 39(6), 273.

Abstract Summary:

Nurses and providers must advocate stronger for prescribed treatment and provide written education about potential symptoms and limitations following diagnosis of TBI. To ensure this education is provided and proper assessment is being obtained, a longitudinal assessment tool has been created to allow follow up with patients throughout their recovery.

Learning Activity:

LEARNING OBJECTIVES	EXPANDED CONTENT OUTLINE
The learner will be able to recognize the discrepancy between accepted guideline treatment prescription and the typical treatment prescription reported in the research in emergency departments and primary care clinics in the U.S.	Guidelines suggest cognitive rest and staged return to sport or activity Less than 10% of cases in the research were successfully prescribed cognitive rest, however the media has helped to create awareness for a slow and methodical return to sport
The accepted protocol when a mTBI patient presents to a ED or Primary care clinic is for observation for 4 hours or until stable and then discharge with written and verbal education. Often these patients reported confusion about their diagnosis and treatment plan because they are treated as low priority, however a typical recovery lasts 3 months or longer until a complete return to baseline.	Patients diagnosed with mTBI show depressive symptoms in greater than 50% of cases, and 30% show endocrine imbalances such as diabetes insipidus. However, very little follow is done with these patients aside from voluntary primary care visits. The patient population often has a difficult time relating their symptoms to their injury.

Abstract Text:

Aim: The purpose of this guideline change is to enhance the ability to care for patients diagnosed with mild traumatic brain injury that are released and non-symptomatic but may develop residual symptoms related to their injury of the duration of their recovery.

Framework: This research followed the framework of family stress theory and included both the condition of the patient but also the entire family and the stresses of self-care or family-provided care managed in the home.

Methods: A systematic review of the literature produced 15 peer-reviewed articles related to the assessment, diagnosis, treatment and education of both patients and patient's families related to diagnosis of mTBI.

Results: Although clinical practice guidelines have been established, accepted and increased understanding of the mTBI patient has been achieved, studies have shown that many mTBI patients are not receiving care along the guidelines provided by best practice. A study by Arbogast et al., 2013 reported that although the majority of providers agreed with the need for prescribed cognitive rest that only 11% facilitated the recommendation. Without cognitive rest after a mTBI, the risk for post-concussive symptoms is greatly increased and the patient must understand the risks of prolonged or increased injury including second-impact syndrome where the brain swells rapidly and catastrophically (Bowers, 2014). It is also unclear with current available research as to what degree of follow-up is obtained by mTBI patients longitudinally. With guidelines calling for reassessment every 2-4 weeks until symptom free and research reporting that almost 50% of patients reporting depressive symptoms, the need for follow-up protocols is paramount to the long-term care of these patients (Marshall, 2012)(Bay & Covassin, 2012). Compound this with the prevalence of athletes too eager to return to sport and the possibility of the miserable minority of patients who see long-term and possibly permanent impairment from this condition, and strict protocols must be in place to ensure proper care is received.

Conclusion: Treatment guidelines must be more closely maintained to ensure patient safety. Nurses and other providers must advocate stronger for prescribed treatment and provide written as well as verbal education about potential symptoms and limitations following diagnosis of TBI. To ensure this education is provided and proper assessment is being obtained, a longitudinal assessment tool has been created to allow long-term follow up with patients throughout the duration of their recovery.