Name of Disorder Paediatric Traumatic Brain Injury

Essay Title Mild traumatic brain injury in adolescents.

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Date: 19.06.2013

Until recently, mild traumatic brain injury (mTBI) has been considered a relatively benign event, with most evidence indicating that victims experience only a short period of impairment, known as post-concussional syndrome (PCS). In adults PCS commonly persists for only several days, after which victims can return to work and sports successfully. In children and adolescents, the recovery path is more prolonged, with most victims demonstrating PCS for up to 30 days (Crowe et al., 2009), with resolution usually achieved by 3 months. However, 5-10% of children and adolescents remain symptomatic at 1 year. The cause of these persisting symptoms is largely unknown at present. What is clear is that enduring symptoms (fatigue, headache, poor concentration, irritability) have a significant impact on the young person's capacity to return to school, leisure and sports. Consequently, they may fall behind in their studies and are unable to participate fully in daily life. While some young people adjust to these limitations, a significant number will have difficulty adjusting, and develop depression, anxiety and post-traumatic stress. These 'internalized' mental health problems may go undetected and untreated, further impacting the young person's quality of life (Anderson, et al 2010).

Recent research, primarily addressing mTBI in sports (sports concussion) has painted a particularly bleak picture regarding long-term outcomes for victims of mTBI, documenting a range of clinically significant problems, including depression and post traumatic stress disorder, and new findings have linked mTBI to increased risk of suicide (McKee et al, 2009; Stern et al, 2011) in retired sportspeople. Although these findings are derived from a small, highly select sample of adult elite athletes, such serious consequences warrant further investigation, particularly in adolescents when the rates of both mTBI and depression are at a peak. Thus, it is timely to examine whether young people with mTBI are indeed at increased risk of serious mental illness, and if so whether it persists and impacts on quality of life and community participation. If this is the case then there is an urgent need for systematic follow-up and appropriate intervention for these young people.

The extent of this problem is highlighted by Australian epidemiological data showing an annual incidence of 149/100,000 cases of traumatic brain injury (TBI) across the age spectrum, of which 43.8% occur in children and adolescents (Fortune & Wen, 1999). In a typical year approximately 3,000 children present to the Emergency Department (ED) at the Royal Children's Hospital (RCH) with TBI and of these 90% are mTBI (Lyttle, et al, 2012). Thus, if even a small proportion of these victims suffer persistent debilitating symptoms post- mTBI, then mTBI is a serious public health problem (Yeates, 2010).

References

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