

Post-Traumatic Stress Disorders on Pediatric Orthopedic Injuries

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Post-traumatic Stress Disorders (PTSD) is a mental disorder that happens on people who experience a catastrophic traumatic event, they show helplessness, fear and other emotions, and the symptom of repeated traumatic emotional numbing and avoidance of traumatic events and increased awareness [1]. Xiang et al. [2] reported that 89% of the injuries were orthopedic traumas with lower limb fracture through studying 119 children after the 2008 Wen-Chuan earthquake in China. A serious trauma often includes the orthopedic injuries, which has a serious impact on the work and daily life after the actual extremities trauma or dysfunction of extremities induced by spinal injury. Because of the immaturity of cognitive capacity and lack of social experience, the rate of pediatric PTSD is high. As orthopaedic surgeons, we should be aware of the psychologic effects, as well as child's physical injuries.

Pynoos et al. [3] reported that the rate of pediatric PTSD was 69.0% 18 months after an earthquake. The rate of PTSD among the children after a massive earthquake struck China's Wen-chuan was the 78.3% in the study of Liu et al [4]. Giannopoulou et al. [5] showed that the symptom of PTSD was associated with age and gender after studying 2037 children undergoing the Athens earthquake; more PTSD, anxiety and depressive symptoms occurred in Girls, and younger children reported significantly more PTSD and anxiety symptoms than the older ones. In a study of 400 children with minor orthopaedic injuries, 33% of patients met the symptoms of a high level of PTSD at 1 month after the trauma [6]. Hence, it is important and meaningful to analyze the diagnosis, prevention and treatment of PTSD induced by orthopedic injuries [7].

If there were no prevention of PTSD or timely diagnosis and treatment for children after a serious orthopedic trauma, the future treatment process will become more difficult [8]. It is important that children have a correct attitude for trauma and actively participate in the prevention and treatment of PTSD. The main treatment of pediatric PTSD includes drug therapy and psychological-social support. Strawn [9] proposed escalation drug therapy for pediatric PTSD. Compared with drug therapy, early effective social support and psychological intervention plays a more important role, which can avoid the occurrence of PTSD through relieving stress, encouraging the self-rehabilitation and social adjustment function [10-12]. The study of Goenjian et al. on pediatric PTSD 5 years after a disaster [13] reported that the rate of PTSD and depression after the positive psychological intervention was lower than the non-treatment group. Dana [14] showed that pediatric PTSD also appeared in a variety of surgeries. Hence, clinicians should pay more attention on postoperative prevention of PTSD. Additionally, whether low- or high-energy orthopaedic injury, the prevalence of PTSD was not significant in the study of Wallace [15]; hence, we also pay attention to the children who sustained a low-energy fracture treated non-operatively.

In recent years, there are many studies on PTSD, but, however, only limited information exists on diagnosis and treatment of pediatric PTSD. In addition, whereas a main focus lies on the treatment and rehabilitation itself, little attention is paid to the pathogenesis and psychological, social intervention of PTSD. Consequently, the Journal of Trauma and Treatment provides a meaningful platform for analyzing the issue of PTSD, we can further discuss and communicate with many experts about the issue of pediatric PTSD.

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