



MANAGEMENT OF CATASTROPHIC CERVICAL SPINE INJURIES

Catastrophic cervical spine injuries are responsible for over 20% of all catastrophic non-fatal injuries in sport (*Kucera KL et al, 2021*) S-69. Proactive planning includes reviewing potential catastrophic injuries such as cervical spine injuries and developing policies and procedures to address these. The policy and procedure should include information for the prevention, recognition and management of cervical spine injuries. While the overall incidence is low compared to the total number of patient encounters ATs have, ATs must be able to recognize and appropriately manage these injuries in efforts of minimizing secondary neurological injury. These injuries usually follow an axial load to the cervical spine seen in contact sports such as football, wrestling, or ice hockey, or non-contact sports such as gymnastics or skiing. With the management of cervical spine injuries, the athletic trainer must consider the unique demands of each sport which include the playing surface, presence of equipment, and emergency response team.

FREE COMMUNICATIONS PROGRAM

Epidemiology of Catastrophic Head and Cervical Spine Injuries in High School and College Football 2000/01 through 2019/20 (*Kucera KL et al, 2022*) S-58. National group reports catastrophic head and neck injuries in football have not significantly declined over the last 20 years. Surveillance and emergency preparedness are critical for prevention and management.

from **RECENT ARTICLES**

"Consensus Recommendations on the Prehospital Care of the Injured Athlete with a Suspected Catastrophic Cervical Spine Injury" *Mills et al, 2020*. The article describes the consensus-based approach developed by the Spine Injury in Sport Group (SISG) - a multidisciplinary team of healthcare professionals specializing in management of acute cervical spine injuries. The authors summarize the available evidence and make recommendations on key concepts related to on-field management of cervical spine injuries. They provide conclusions and recommendations related to the training of emergency responders, considerations related to the receiving medical facilities, facemask and equipment removal, spinal immobilization, and transport.

"Best Practices and Current Care Concepts in Prehospital Care of the Spine-Injured Athlete in American Tackle Football March 2-3, 2019; Atlanta, GA" *Courson et al, 2020*. This article also highlights the work of the SISG from the Consensus Meeting in March 2019. This review dives deeper into the didactics of on-field management and illustrates best practices for on-field assessment for an athlete with cervical spine injury, highlighting emergency preparation, medical time outs, accessing the airway, equipment removal, transfer techniques, and preparing the injured player for transport.

"Implementation Science: Lessons Learned From Evaluating Practice Recommendations for the Care of Patients With Spine Injuries" *Snyder Valier et al, 2019*. Practice recommendations, such as position statements are developed to assist athletic trainers with using evidence-based recommendations for the care of their athletes. Unfortunately, simply communicating these recommendations does not ensure integration into clinical practice. This study explores the practice recommendations associated with care of the spine-injured athlete and demonstrates that despite these recommendations, many are not implemented into clinical practice. This article underpins the need for a collaborative approach to identifying influential factors and barriers to implementation of best practices which would further allow for enhanced patient care and improved clinical outcomes.

RESOURCES



JAT CHAT Podcast: [Consensus on the Prehospital Care of Athletes with Suspected Catastrophic Cervical Spine Injury.](#)



The Sport Institute - Spine Injury in Sports Group: [Managing On-Field Cervical Spine Injuries](#)



National Athletic Trainers' Association Position Statement: [Reducing Intentional Head-First Contact Behavior in American Football Players](#)



National Center for Catastrophic Sport Injury Research

