On-Demand Education

**Acute Cervical Spine Injury Pathophysiology & Epidemiology, (II, III)**

Level: Essential  
CEU: 1 Category A  
Margot Putukian, MD  
Erik Swartz, PhD, ATC, UMass Lowell

An understanding of the current information and literature related to the epidemiology and pathophysiology for acute cervical spine injury (CSI) in sport is paramount to appropriate planning and medical management. This session will offer essential information related to these considerations for CSI in order that the practitioner can better appreciate the rationale as they inform suspected cervical injury care.

At the end of this session, attendees will be able to:

a. Identify the recent epidemiological trends in which sports CSI carries the highest incidence and prevalence.

b. Differentiate between potentially serious and catastrophic injuries in sport compared with non-emergent neck injuries.

c. Describe the physiologic cascade of events following injury to the spinal cord.

d. Relate the timeline of events involved in acute CSI.

**Achieving Consensus on Prehospital Care of the Injured Athlete With a Suspected Catastrophic Cervical Spine Injury, (I, II, III)**

Level: Essential  
CEU: 1 Category A  
Brianna Mills, PhD, Harborview Injury Prevention & Research Center  
Stan Herring, MD, Co-Founder of The Sports Institute at UW Medicine

During this session, the speakers will contextualize the consensus- and evidence-based approaches used to develop the 2020 “Consensus Recommendations on the Prehospital Care of the Injured Athlete With a Suspected Catastrophic Cervical Spine Injury” and the associated best practice paper and educational video.

At the end of this session, attendees will be able to:

1. Explain the purpose and process of a RAND/UCLA appropriateness method, including the Delphi process.

2. Demonstrate how each stage of the method builds toward consensus.

3. Evaluate the evidence base underlying key concepts in prehospital care of an athlete with suspected catastrophic cervical spine injury.
There are approximately 17,000 new cases of spinal cord injury each year in the United States. About 9 percent of these injuries result from sports, the fourth leading cause of spinal cord injury (National Spinal Cord Injury Statistical Center, 2018). The athletic population has several unique characteristics and specifically one (e.g., equipment) that may hamper care by medical providers. Over the past two decades, equipment advances developed to prevent further harm have sometimes impeded appropriate care. No longer can medical providers assume that one protocol or technique will be sufficient to care for the spine-injured patient. The purpose of this presentation will be to review and assess research over the past two decades to afford attendees with information to be able to incorporate appropriate procedures to provide best care for the patient.

At the end of this session, attendees will be able to:
1. Explain the difference between spinal motion restriction and spinal immobilization.
2. Assess and compare the components of the decision-making process between different health care providers for activating spinal motion restriction for the spine-injured athlete.
3. Compare and contrast differences between current evidenced-based best practices for on-field removal of equipment for the spine-injured athlete and compose ideas that may add to future protocols.
4. Identify evidence-based practices for the selection of the different types of extrication equipment and transfers (log roll, multi-person, straddle lift-and-slide, scoop stretcher, vacuum mattress).
5. Assess the potential outcomes when different techniques are employed.

The purpose of this presentation is to present best practices for emergency preparation in athletics. Emergency situations may arise at any time during athletic events. Expedient action must be taken in order to provide the best possible care to athletes in emergency and/or life-threatening conditions. Development and implementation of an emergency action plan (EAP) helps ensure the best care will be provided.

At the end of this session, attendees will be able to:
1. Review best practices for recognition and management of emergency situations in athletics
2. Provide EAP guidelines for communication, venue implementation and response documentation, review and rehearsal, scenario-based training and post critical incident stress management.
3. Discuss role of medical time out in athletics.
Emergency Evaluation of Spine Injuries, (II)
Level: Essential
CEU: 1 Category A
Glenn Henry, MA, PMDC, Athens Technical College

The purpose of this session is to focus on sharing specifics about on-field evaluation of spine injuries.

At the end of this session, attendees will be able to:
1. Value the priority that safety plays in the overall assessment care of the patient.
2. Explain the appropriate assessment and care of a suspected spine-injured patient.
3. Demonstrate the appropriate assessment and care of a suspected spine-injured patient.
4. Understand the components of a prehospital assessment, including the scene survey, primary survey and secondary survey.

Spine Injury: Special Situations Overview, (III)
Level: Essential
CEU: 1 Category A
University of Georgia Athletics Sports Medicine Staff

The purpose of this session is to highlight live demonstrations of spine boarding in special situations,

At the end of this session, attendees will be able to:
Demonstrate techniques for spine-boarding with:
  a. Head not in neutral position
  b. Confined space
  c. Gymnastics pit
  d. Pole vault pit
  e. Water rescue

Spine Injury: From Evaluation To Emergency Department Admission, (II)
Level: Essential
CEU: 1 Category A
University of Georgia Athletics Sports Medicine Staff

The purpose of this session is to provide live demonstrations of spine boarding utilizing the new guidelines from Spine Injury in Sports Group consensus statement.

At the end of this session, attendees will be able to:
Demonstrate techniques for:
  a. Multi-person lift
  b. Supine log roll
  c. Prone log roll
  d. Scoop stretcher
  e. Football equipment removal, both on the field and in the emergency department
Panel Discussion: Reduction Strategies in Catastrophic Injury, (III)
Level: Advanced
CEU: 1 Category A
Allen Sills, MD, National Football League
Scott Anderson, MS, ATC, University of Oklahoma
Darryl Conway, MS, ATC, University of Michigan
Jim Ellis, MD, University of South Carolina School of Medicine at Greenville

The purpose of this panel discussion is to review the latest best practice recommendations on the optimal care for athletes suspected of cervical spine injuries (CSI).

At the end of this session, attendees will be able to:
1. Educate the target audience on practical approaches to the athlete who may have suffered a potential CSI.
2. Review literature that led to the expert opinions of the Spine Injury in Sports Group that developed the consensus recommendations.
3. Discuss strategies that can mitigate the significant and often long-lasting consequences of CSI in the athlete.

Surgical Management of Spine Injuries, (III)
Level: Mastery
CEU: 1 Category A
Wellington Hsu, MD, Northwestern Medicine

For elite athletes who sustain an unstable spinal injury, surgical management is required. The decision-making process for the athlete is dependent on clinical presentation, history of neurologic deficits, preservation of spinal cord function and career aspirations. The type of surgical intervention depends on the type of bony and soft tissue injuries.

At the end of this session, attendees will be able to:
1. Identify advanced imaging protocols for elite athletes with suspected cervical injury.
2. Evaluate surgical approaches to certain types of cervical/thoracic trauma.
Specialist Chats
These live, one-hour chats are designed to allow the attendee to engage with members of the Spine Injury in Sport Group within a setting-specific conversation. Attendees are encouraged to watch the on-demand education prior to these events and to engage in the discussion and Q&A sessions.

12 p.m. – 1 p.m. CDT Tuesday, May 11
College/University: Power 5
   Darryl Conway, MS, ATC, and Scott Anderson, MS, ATC

Secondary School
   Lance McNamara, MS, ATC, EMT-I

12 p.m. – 1 p.m. CDT Wednesday, May 12
Professional Sports
   Jim Ellis, MD, and Stan Herring, MD

College/University: Division I
   Ron Courson, ATC, PT, NRAEMT, and Murphy Grant, MS, ATC, PES

College/University: Division II
   Erik Swartz, PhD, ATC

College/University: Division III/NAIA
   Tim Neal, MS, ATC, CCISM

Peer Chats
The engagement doesn’t stop with our specialists chats. Join us in one of our topic-based or setting-based discussions! Share emergency action plan templates, engage in procedure discussion and share strategies you are currently implementing at your organization. All chats are in Central Daylight Time (CDT).

Monday, May 10
11 a.m. – 12 p.m.
   Secondary School: Rural
   Professional Sports

12 p.m. – 1 p.m.
   Surgical Management of Spine Injury
   Secondary School: Urban/Suburban

1 p.m. – 2 p.m.
   Emergency Department and EMS Coordination

2 p.m. – 3 p.m.
   Spine Injury Emergency Action Plans/Medical Time Out

Tuesday, May 11
11 a.m. – 12 p.m.
   Spine Injury Special Situations
   Spine Injury Research
   College/University: Division I

1 p.m. – 2 p.m.
   College/University: Power 5
   Equipment Removal & Lift Techniques

2 p.m. – 3 p.m.

3 p.m. – 4 p.m.

Wednesday, May 12
11 a.m. – 12 p.m.
   College/University: Division II

1 p.m. – 2 p.m.
   College/University: Division III/NAIA