



Development of the 2012 American Chiropractic Board of Sports Physicians position statement on concussion in athletics

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Abstract

Objective: The purpose of this article is to provide a summary of the development of the American Chiropractic Board of Sports Physicians (ACBSP) Position Statement on Concussion in Athletics regarding the management of concussion in sport and to offer suggestions to qualifying doctors of chiropractic (DCs) to make return-to-play decisions and clarify common concepts pertaining to evaluating and managing concussion in sport.

Methods: A literature review of position statements from sports medicine organizations was performed. The authors reviewed each statement for content. Key issues in the management of concussion in sport were identified with special consideration to concussion management by DCs. A position statement on the management of concussion in sport was drafted by the authors and submitted to the Board of Directors of the ACBSP for review. The Board of Directors called for minor revision; and after all revisions were made, the document was resubmitted. The Board of Directors of the ACBSP accepted the document for publication and presentation. The document was presented and disseminated to certificants by the ACBSP at the 2011 Chiropractic Sports Sciences Symposium.

Results: The 2012 ACBSP Position Statement on Concussion in Athletics was accepted by the ACBSP Board of Directors.

Conclusion: The Position Statement on Concussion in Athletics has been accepted by the ACBSP. This document offers guidance on the management of concussion in sport and provides qualifying DCs information to make return-to-play decisions.

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Introduction

Concussion in sport is a common injury that has potential for severe long-term sequelae if not managed appropriately.¹ Despite high levels of publicity and advances in research regarding concussion, the care and management plans for concussion are transitional. Currently, an evidence-based “criterion standard” for concussion management has yet to be defined and accepted. Although the appropriate approach to management continues to be developed, a focus on concussion awareness and education has been emphasized as a way to protect athletes from mismanagement and prevention of catastrophic and long-term injury.² For example, the Centers for Disease Control and Prevention have developed a Web-based education portal for athletes, coaches, parents, and health care providers on sport concussion.³

Several sports medicine organizations have pushed for legal support in the creation of concussion policy in athletics to proactively protect individuals from sports concussion.² At this time, more than 40 states have passed legislation designed to dictate education standards and care pathways for concussed athletes.⁴ The proposed intent of the concussion laws was designed to protect athletes from improper care. Unfortunately, some organizations have used the concussion platform as an opportunity to redefine the state practice acts of other health care professions. The chiropractic profession has been a victim to this in some states, as legislation has been passed that removes concussion management from the chiropractic scope of practice.⁵

In an attempt to clarify to interested parties the scope of practice for doctors of chiropractic (DCs) who manage concussion, an American Chiropractic Board of Sports Physicians (ACBSP) board member and lead author has been asked on multiple occasions to attend state chiropractic and state legislative meetings to provide input on concussion legislation. It became clear that what was initially perceived as a political attack on DCs from other professional organizations was more often a misunderstanding in regard to the scalability of the education and training of different populations of DCs in regard to the assessment and management of concussed individuals. In the authors' experience, many legislators, lobbyists, and allopathic health care providers are not aware that there are DCs who are appropriately trained to manage concussion and do so on a regular basis.

The ACBSP identified the need to develop a position statement on the management of concussion by DCs. As the certifying body for chiropractic sports physicians in

the United States, the ACBSP believes its certificants represent the largest specialty group of DCs that manage concussed individuals as a routine clinical practice. The purpose of this article is to describe the development of the ACBSP position statement on concussion in sport.

Methods

After identifying a need to communicate the role of DCs in the management of concussion in sport, the ACBSP Board of Directors nominated 2 advanced certificants to develop a position statement on the management of sport concussion by DCs. The authors were chosen as content experts based on their clinical experience, research history, and educational background regarding concussion. The lead author is a Diplomate of the ACBSP with 30 years of experience in sports medicine practice and 20 years of teaching and research experience on the topic of concussion. He has served as an expert consultant in regard to the development of concussion management and legislation. The second author is a Diplomate of the ACBSP with 4 years of experience in the field of sports medicine, including postgraduate residency and fellowship training in sports medicine. Both authors practice in an elite sports medicine clinic and regularly serve as the primary care providers to manage concussed athletes as a part of their daily clinical practice.

The authors initiated the development of the position statement by reviewing the position statements and consensus statements on concussion from leading national and international organizations, including the 3rd Zurich Consensus Statement of Concussion, National Athletic Trainers Association, American College of Sports Medicine, and American Academy of Neurology.⁶⁻⁹ These documents were reviewed for identification of key issues in concussion management relevant to the chiropractic profession. Additional insight on the topic was gained by oral communication of the authors with international leaders in the subject and legislators involved in policy development on the state and national levels.

During the review of existing position statements from other sports medicine professional organizations, the authors identified the following key issues that a position statement on this topic should include:

- An acknowledgment that the best practices in concussion evaluation and management are constantly changing and that is the responsibility of health care providers involved in the management

of concussed individuals to maintain a current knowledge base on the topic.

- A summary of the current best practices in concussion management.

In addition, the authors identified a lack of published guidelines by DCs that describe the ability of properly trained DCs to manage concussion in sport. The following statements were included as the position of the ACBSP:

- A statement of fact regarding that there are DCs that have education on the current best practices in evaluation and management of the concussed individual.
- A statement of fact that DCs with special certification in sport obtained through the ACBSP have postgraduate training in concussion management.

The proposed position stand manuscript was drafted; and it was reviewed by the Board of Directors of the ACBSP (Fig 1) for content, clarity, and consistency with the mission of the ACBSP. This review took place through written and oral communication over a 3-month period. No major revisions were requested. One minor revision was requested by the Board of Directors. After review and revision by the Board of Directors, the document was accepted as a position stand for the ACBSP. The document was presented and disseminated to ACBSP certificants at the 2012 ACBSP Sports Sciences Symposium in Portland, OR.

Results

The ACBSP Position Statement on Concussion in Athletics is included below in its entirety (Appendix A).

2011 ACBSP BOARD OF DIRECTORS

- Dale Buchberger, PT, DC, DACBSP
- Pat Helma, DC, DACBSP
- Joseph Horrigan, DC, DACBSP
- William Moreau, DC, DACBSP
- Anne Sorrentino Hoover, DC, DACBSP
- Robert Nelson, DC, DACBSP
- Ken Luhning, (public member)
- Andrea Sciarello, DC, CCSP

Fig 1. ACBSP Board of Directors.

This document was presented at the 2012 ACBSP Sports Sciences Symposium, has been distributed electronically and in print format to certificants of the ACBSP, and is included in this issue of the *Journal of Chiropractic Medicine*.

Discussion

The ACBSP Position Statement on Concussion in Athletics is a landmark document for health care providers, administrators, and regulatory bodies because the paper identifies a subset population within the chiropractic profession who has received specific education, training, and evaluation regarding the current concepts of concussion assessment and management in the sporting arena. Recommendations from leading medical organizations have identified the ideal health care provider for the management of concussion as one with specific training and experience in concussion.¹⁰ The ACBSP Position Statement identifies those individuals within the chiropractic profession that meet these criteria.

The ACBSP Position Statement on Concussion in Athletics identifies the current best practices regarding concussion for any health care provider. These recommendations were created by the authors after a careful review of consensus statements and position statements from other leading professional organizations in the field of sports medicine, including the 3rd International Consensus on Concussion in Sport, the American College of Sports Medicine, the National Athletic Trainer's Association, and the American Academy of Neurology.⁶⁻⁹ Best practices shared from these association's statements include commentary on the pathomechanics, symptoms, and acute and long-term management of the head-injured athlete. The "Consensus Statement on Concussion in Sport: The 3rd International Conference on Concussion in Sport Held in Zurich, November 2008" is specifically identified as a key resource for best practices in concussion management.⁶

This Position Statement is unique in that it identifies a specialty group within a profession that is specifically trained in the management of concussion. In the authors' literature review, only one document of this type was identified. The American Academy of Neurology states that "Members of the AAN specialize in treating disorders of the brain and nervous system, and some members have particular interest and experience caring for athletes and are best qualified to

develop and disseminate guidelines for managing athletes with sports-related concussion.”⁹ The ACBSP Position Statement makes a parallel statement that “Consultation with a qualified health care provider, including a DACBSP or CCSP, is essential after suspected concussion.” As the certifying board in chiropractic sports medicine, the ACBSP is composed of certificant who have been trained and have passed specialty certification examination in sports medicine, including concussion.

Limitations and future studies

The position paper construction was limited by a lack of diversity of other qualified health care providers’ contribution to the position paper. The paper would be stronger if there was a multiple-disciplinary consensus process performed to support and amend the position statement. In the future, a multiple disciplinary task force should be considered for the construction of a formal consensus document regarding the management of concussion by a chiropractic physician.

An informal review of literature was performed with the intent of identifying current guidelines for educational requirements on the topic of concussion for health care providers of different disciplines. Unfortunately, there does not appear to be any substantial body of literature on this topic. Information assessing the educational training and practical skills of health care providers may be valuable to the public interest as well as sporting organizations and legislators who intend to develop new policies or regulations regarding concussion in sport.

By the time this article was submitted for publication, an updated version of the Zurich consensus was published. An updated Position Statement that references the new Zurich consensus as well as additional references should be considered by the ACBSP.

Conclusion

The ACBSP developed guidelines regarding the management of concussion in sport, recommendations for qualifying DCs to make return-to-play decisions,

and clarification of common care pathways pertaining to evaluating and managing concussion in sport.

Funding sources and potential conflicts of interest

No funding sources or conflicts of interest were reported for this study.

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Appendix A. ACBSP Position Statement on Concussion in Athletics

The management of concussion in athletics is an area of sports medicine that is clearly in continued evolution. Several methods of evaluating and assessing concussion that were once considered standards of care are now defunct. The importance of arriving at correct clinical decisions regarding the assessment, management, and return-to-play criteria of individuals who have sustained concussion remains one of the greatest challenges to sports medicine providers.

Regarding the qualifications of Doctors of Chiropractic and their involvement in concussion management, it is the position of the ACBSP that:

1. Doctors of Chiropractic with current ACBSP postgraduate certification(s) in sport (DACBSP and CCSP) are qualified to manage the concussed individual in any patient population.
2. Doctors of Chiropractic may evaluate, diagnosis, and manage the concussed individual. The pre-requisite management skills for a concussed athlete can be supported by additional education such as the ACBSP concussion registry.
3. All health care providers involved in the management of concussed individuals have an obligation to maintain current knowledge regarding best practices in concussion management. The ACBSP does not endorse any specific methodology of concussion management because the methods of assessment and management of concussion are in transition.

Regarding current best practices in concussion management, it is the ACBSP's position that:

1. Concussion may be caused by a direct blow to the head or elsewhere on the body.
2. Loss of consciousness is a key but NOT a required factor in the diagnosis of concussion. An individual may be concussed without a loss of consciousness.
3. Individuals with concussion may present with a wide range of signs and symptoms such as

physical signs of neurologic impairment or/and symptoms of impaired brain function that may include abnormal behavior.

4. An athlete suspected of concussion must be removed from play and immediately assessed.
5. The concussed individual must not be allowed to return to play the same day he or she was concussed.
6. Any individual with signs or symptoms of concussion at rest or with exertion should not be allowed to participate in sport until the signs and symptoms have resolved.
7. Consultation with a qualified health care provider, including a DACBSP or CCSP, is essential after suspected concussion.
8. Individuals with concussion should be directly observed, receive serial examinations, and not be left alone after the injury until their constellation of symptoms is static.
9. Any increase of symptoms (especially increasing headache, decreasing neurologic function, presence of any focal neurologic deficit, altered vital signs, or repeated vomiting) in a concussed individual requires urgent evaluation of the individual in a hospital setting.
10. A graded return-to-play protocol must be followed prior to resumption of full sporting activity.
11. Clearance by a qualified health care provider must be sought prior to the athlete returning to play.
12. An athlete must be symptom-free at rest and with exercise prior to returning to play.

A recommended current reference for consensus-based approach to concussion management is the "Consensus Statement on Concussion in Sport: The 3rd International Conference on Concussion in Sport Held in Zurich, November 2008." Agreement exists pertaining to principal messages conveyed within this document; the authors acknowledge that the science of concussion is evolving; and, therefore, management and return-to-play decisions remain in the realm of clinical judgment on an individualized basis.

Sports medicine providers are encouraged to copy and distribute freely the following resources: Zurich Consensus document—includes the Sports Concussion Assessment Tool (SCAT2).