5th International Conference on Concussion in Sport (Berlin)

Paul McCrory,¹ Willem H Meeuwisse,² Jiří Dvořák,³ Ruben J Echemendia,^{4,5,6} Lars Engebretsen,^{7,8,9} Nina Feddermann-Demont,^{10,11} Michael McCrea,^{12,13} Michael Makdissi,^{14,15,16} Jon Patricios,^{17,18} Kathryn J Schneider,^{19,20} Allen K Sills^{21,22}

Sport-related concussion (SRC) has received much media coverage over the past 5 years. In the face of misinformation about this injury in the minds of parents, coaches and athletes, it is critical that all involved stakeholders receive scientifically sound and up-to-date information regarding SRC and its potential consequences.

One of the most significant developments in SRC over the past two decades has been the establishment of the Concussion In Sport Group (CISG). This group has organised the key consensus meetings in this field and has published assessment tools that have become regarded as the best available information globally. The outcome documents from the meetings are first and foremost intended to guide clinical practice; however, it is hoped that they also help form the agenda for SRC research.

In November 2001, the 1st International Conference on Concussion in Sport was held in Vienna, Austria. The subsequent four conferences (Prague, Zurich (twice) and Berlin) have developed into more formal consensus meetings broadly following the organisational guidelines established by the US National Institutes of Health. The most recent meeting held in Berlin (on 27-30 October 2016) was supported by International Ice Hockey Federation (IIHF) in partnership with FIFA, the IOC, World Rugby, and the International Equestrian Federation (FEI). In addition to the expert panel and observers, 400 participants representing the international sporting medical federations, committees,

clinicians and researchers attended. For the meeting, the CISG expert committees reviewed almost 60 000 published papers on SRC definition, assessment, biomarkers, management, treatment, pathophysiological changes, CTE and injury prevention. The systematic review papers were presented to the audience for discussion and following the open sessions, the expert panel finalised these reviews.

The resulting Consensus Statement and the Sport Concussion Assessment Tools (SCAT) presented in a pair of BJSM issues contain important advancements in the field. Among others, there is a clarification of the definition of concussion, a clear approach to initial management, and a recovery period that involves shorter initial rest and, in some cases, the need for rehabilitation. In these special issues of BJSM, the 12 review papers are published with the abstracts from the consensus meeting to provide important background information. The Consensus Statement, the Concussion Recognition Tool 5, the SCAT5 and the Child SCAT5 (the version number 5 has been utilised to be consistent with the numbering of the 5th International Conference on Concussion in Sport) are provided with the objective of offering a simple, clear message with tools that equip the practitioner to diagnose and manage concussion in various different sports.

¹Florey Institute of Neuroscience and Mental Health, University of Melbourne, Heidelberg, Victoria, Australia ²Sport Injury Prevention Research Centre, Faculty of Kinesiology, University of Calgary, Calgary, Alberta, Canada ³Department of Neurology and Swiss Concussion Center, University of Zurich, Zurich, Switzerland ⁴University Orthopaedic Center, Concussion Care Clinic, State College, Pennsylvania, USA

⁵Department of Psychology, University of Missouri-Kansas City, Kansas City, Missouri, USA ⁶Psychological and Neurobehavioral Associates, Inc

⁷Department of Orthopaedic Surgery, Oslo University Hospital and Faculty of Medicine, Oslo University Hospital, Oslo, Norway

⁸Oslo Sports Trauma Research Center, Oslo, Norway ⁹International Olympic Committee (IOC), Lausanne, Switzerland

¹⁰Department of Neurology, University Hospital Zurich, Zurich, Switzerland

¹¹Swiss Concussion Center, Schulthess Clinic, Zurich, Switzerland

¹²Department of Neurosurgery, Medical College of Wisconsin, Milwaukee, Wisconsin, USA
¹³Clement Zablocki VA Medical Center, Milwaukee,

Wisconsin, USA ¹⁴Melbourne Brain Centre, Florey Institute of Neuroscience & Mental Health, Austin Campus, Heidelberg, Victoria, Australia

¹⁵La Trobe Sport and Exercise Medicine Research Centre, La Trobe University, Bundoora, Australia ¹⁶Olympic Park Sports Medicine Centre, Melbourne, Australia

 ¹⁷Section of Sports Medicine, Faculty of Health Sciences, University of Pretoria, Johannesburg, South Africa
 ¹⁸Department of Emergency Medicine, Faculty of Health Sciences, University of the Witwatersrand, Johannesburg, South Africa

¹⁹Faculty of Kinesiology, Sport Injury Prevention Research Centre, Calgary, Alberta, Canada ²⁰Alberta Children's Hospital Research Institute and Hotchkiss Brain Institute, Cumming School of Medicine, University of Calgary, Calgary, Alberta, Canada ²¹Department of Neurosurgery, Orthopaedic Surgery and Rehabilitation, Franklin, Tennessee, USA ²²Vanderbilt Sports Concussion Center, Vanderbilt University Medical Center, Franklin, Tennessee, USA

Correspondence to Associate Professor Paul McCrory; paulmccr@icloud.com

Competing interests For full author disclosures and competing interests see the online supplementary folder ICMJE forms on the *BJSM* website (http://dx.doi. org/10. 1136/bjsports-2017-097878).

Provenance and peer review Not commissioned; internally peer reviewed.

© Article author(s) (or their employer(s) unless otherwise stated in the text of the article) 2017. All rights reserved. No commercial use is permitted unless otherwise expressly granted.



To cite McCrory P, Meeuwisse WH, Dvořák J, et al. Br J Sports Med 2017;51:837

Br J Sports Med 2017;**51**:837 doi:10.1136/bjsports-2017-097878





5th International Conference on Concussion in Sport (Berlin)

Paul McCrory, Willem H Meeuwisse, Jirí Dvorák, Ruben J Echemendia, Lars Engebretsen, Nina Feddermann-Demont, Michael McCrea, Michael Makdissi, Jon Patricios, Kathryn J Schneider and Allen K Sills

Br J Sports Med 2017 51: 837 doi: 10.1136/bjsports-2017-097878

Updated information and services can be found at: http://bjsm.bmj.com/content/51/11/837

These include:

Email alerting service Receive free email alerts when new articles cite this article. Sign up in the box at the top right corner of the online article.

Notes

To request permissions go to: http://group.bmj.com/group/rights-licensing/permissions

To order reprints go to: http://journals.bmj.com/cgi/reprintform

To subscribe to BMJ go to: http://group.bmj.com/subscribe/