



Netcare Waterfall
City Hospital



Professor Jon Patricios

THE TRUTH ABOUT CONCUSSION

Concussion can occur in almost any sport

Continuing to play sport with an undiagnosed concussion can have dangerous or potentially even fatal consequences, warns Professor Jon Patricios, director of Waterfall Sports Orthopaedic Surgery, based at Netcare Waterfall City Hospital.

“It is important that anyone who has had a blow to the head is appropriately assessed for concussion, and in the school sport context, this is something all coaches, trainers, players and parents of participants need to be aware of,” says Patricios, who is also a professor of Sport and Exercise Medicine at the University of the Witwatersrand’s Faculty of Health Science and leader of the Wits Sport and Health (WiSH) research group.

He points out that any activity where there may be a fall, the possibility of a fast-moving ball striking the head or the head colliding with the ground, or a collision with another person or object could result in concussion. This includes everything from rugby, cricket and gymnastics to water polo, hockey, motorcycling and equestrian sports, among others.

“Whenever there is any chance that a person may have suffered concussion, it is imperative that they are examined by a doctor who will guide the next steps. It is just not worth taking a chance when it comes to potential neurological harm; a trained clinical eye is needed to detect subtle signs of head injury, which may need specific interventions. Certainly, any deterioration of an athlete’s condition after a suspected concussion should be treated as an emergency.

“Even after a doctor’s consultation, the person should not be left alone, even if they are cleared to go home, as anyone who has suspected concussion must be monitored for any change in their condition,” warns Patricios, who is the founder and a director of Sports Concussion South Africa.

Patricios has been instrumental in making the latest in international concussion management protocols available to local schools and amateur athletes. He recently co-led the International Consensus Statement on Concussion in Sport, published in the British Journal of Sports Medicine in June 2023.



The treatment team typically includes sports physicians, physiotherapists, neuropsychologists, radiologists and exercise therapists, and may also involve neurologists and/or neurosurgeons if the patient requires hospitalisation in the event of more complex concussion injuries.

“Today, updated protocols allow us to individualise concussion management to precisely tailor treatments to address specific areas of deficit. Scientifically validated computer brain function testing before the sport season starts provides a useful baseline for clinical assessment in the event of suspected concussion,” he says.

“The pre-season clinical and computerised cognitive testing can be performed at the school, and these results enable doctors to compare reaction times, memory and other significant measures post injury. This provides specially valuable insight as a point of comparison for assessing and safely managing the patient if they should suffer a head injury during the season, or even years later, as concussion is not usually detectable with standard CT or MRI scans after an accident.

“Importantly, concussions can be treated. In fact, failure to do so may result in residual deficits and an increased likelihood of further concussions.”

Why it matters

“It is essential for parents and for anyone involved in amateur or school sports to be aware of the dangers of concussion and take reasonable precautions to prevent or mitigate the risk to players. Especially for the developing brains of children and teenagers, it can be harmful to rush a return to school or training too soon,” Patricios says.

“Exercise is medicine. It is now utilised early in the return to a normal routine, helping to stimulate recovery. The days of ‘lying in a dark room’ after a concussion are over. Exposure to potential collisions is another matter – such activities should only be considered under medical guidance.

“One of the primary dangers is second impact syndrome. This can happen when a person has concussion and later, within a week or so, receives a second blow to the head – even a relatively mild impact bump could be very serious and even potentially fatal.

“With more public awareness and the freely available concussion guidelines, tragedies and long-term brain damage related to concussion in sports can be minimised, and outcomes for affected amateur and school sports players can be optimised,” Patricios concludes.

Crucial information, including the latest 2023 guidelines on what to do when a concussion is suspected, how to monitor the person at home after the injury if they are not hospitalised, and protocols for returning to learning and sports after concussion, are available for free download at <http://www.sportsconcussion.co.za/management-protocols/use-these-tools/>.

“After a concussion, guidance should be sought regarding returning to work, school, sport or exercise,” advises Patricios. “Concussion symptoms must be observed on an ongoing basis until they have cleared completely, and the guidelines for a gradual step-wise return to normal activities followed.”

Sports concussion centres, such as those located at Netcare Waterfall City Hospital, the Centre for Sports Medicine at Netcare Rosebank Hospital and Sports Medicine Africa at Netcare Krugersdorp Hospital, incorporate multidisciplinary expertise in their approach to clinical assessment, monitoring and therapy for concussion recovery.