

PLACEBO

Undiagnosed concussion can have dangerous consequences

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 Prof 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. 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 that may need specific interventions. 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 Prof Patricios who is the founder and a director of Sports Concussion South Africa and 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.

Crucial information, including the latest 2023 guidelines on what to do when 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 is 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. Concussions symptoms must be observed on an ongoing basis until they have completely cleared, and the guidelines for a gradual stepwise return to normal activities followed," Prof Patricios says. 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.

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 especially 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."

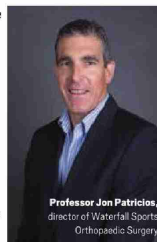
WHY IT MATTERS

"It is essential for anyone involved in amateur or school sports and parents 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," Prof Patricios says.

"Exercise is medicine and 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, takes longer and such activities should only be considered under medical guidance."

"One of the primary dangers is second impact syndrome, which 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," Prof Patricios concludes. **MC**



Professor Jon Patricios,
director of Waterfall Sports
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