Strict rest after a sports related concussion slows recovery and may prolong symptoms, says a consensus statement drawn up by a US expert panel on how best to treat and manage the condition, and published in the *British Journal of Sports Medicine.*

Most of these concussions get better within a month and can be effectively treated, it says.

Persisting symptoms are thought to be a complex interplay between the physical and psychological effects of the new injury and underlying conditions.

The consensus statement was developed by the Team Physician Consensus Conference (TPCC), an annual project-based alliance of six major professional associations, with the aim of helping team doctors to provide the best medical care for athletes.

It updates a previous version on the management of concussion, published in 2011.

Data harvested from US emergency department visits, doctors' appointments, and a high school injury surveillance system (RIO) estimate the number of sports related concussions to be between 1 and 1.8 million every year in the U.S. alone among those up to the age of 18, with around 400,000 occurring in high school athletes.

But the symptoms of concussion aren't specific and there are currently no clinically useful diagnostic tests, such as blood tests, genetic tests or standard imaging techniques. So the true incidence and prevalence of sports related concussion remain unknown, says the statement.

Signs and symptoms indicating more severe brain or neck (cervical spine) injury and warranting immediate emergency care include:

- Immediate seizure (at or minutes after impact)
- More than brief loss of consciousness
- Severe or worsening headache
- Persistent or recurrent vomiting
- Increasing lethargy, confusion
- Tingling or numbness in hands and/or feet; double vision
- Neck pain; bony tenderness; limited range of movement and/or deformity

And there is a range of symptoms that may occur immediately or some time later, which may also be indicative of concussion, says the statement.

These include: amnesia; disorientation; brain fog; inability to focus; slurred speech; excessive drowsiness; headache; dizziness; balance issues; visual disturbances; hypersensitivity to noise; irritability; and sleep disturbances.

Most sports related concussion is treatable, says the statement. And most affected athletes will recover fully within 2 (adults) to 4 weeks (children).

The number and severity of the initial array of
symptoms best predict how long it will take to recover.

Factors that may prolong or complicate recovery include: previous concussions; loss of consciousness for more than 1 minute; younger age; pre-existing conditions, including migraine, ADHD, learning disabilities, depression, anxiety/panic attacks, and motion sickness.

Current evidence suggests that strict rest after a concussion slows recovery and increases the probability of prolonged symptoms. Recent research shows that progressive moderate aerobic exercise within the first week helps aid recovery.

Most athletes don't require over-the-counter and/or prescription meds for acute symptoms. And there's no current evidence to suggest that 'nutraceuticals' help to either ward off or treat concussion, says the statement.

Persisting symptoms, such as fatigue, headache, and anxiety, aren't usually caused by one factor alone, but are thought to be a complex interplay between the physical and psychological effects of the new injury and underlying conditions, says the statement.

In these circumstances, treatment should focus on the particular symptom: cognitive behavioural therapy and/or lifestyle changes to sleep, nutrition, and hydration, for example.

More high quality research is needed to fully understand young people's risks of taking part in sport after concussion and the effects on their long term brain health and wellbeing, says the statement.

"Most athletes who have been concussed will get better, and will be able to return to play," comments Dr. Margot Putukian, TPCC executive committee member.

"Each injury is unique and will have its own timeline. But athletes should take comfort in knowing that there are treatments out there, and there are steps they can take to aid their own recovery, she adds.


Provided by British Medical Journal

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.