



LETTER OF THE DAY

Concussion effects believed to be cumulative and lasting

Re: "Getting inside the head of concussed athletes" (Sports, Feb. 22)

As medical professionals who conduct research on concussions and provide care for many recreational, university and professional athletes, we feel compelled to correct a couple of statements quoted in the recent article on concussion training.

First, despite what was suggested by Cameron Marshall, the effects of concussions are believed to be cumulative and lasting. We know that even fully recovered athletes who have suffered a first concussion are four to six times more likely to suffer a second concussion as compared to athletes who have not suffered a concussion. All athletes who have suffered multiple concussions take longer to recover from subsequent concussions. Professional athletes who have suffered multiple concussions are thought to be more at risk for mild cognitive impairment (a precursor to dementia) and depression years after they have retired.

There is also research to suggest that professional athletes who have suffered multiple concussions are more at risk for developing neurodegenerative disorders such as Alzheimer's disease, Amyotrophic Lateral Sclerosis (ALS) and possibly

Chronic Traumatic Encephalopathy (CTE).

Second, we do not wish athletes or their parents to feel that they should avoid a visit to an emergency department because they may receive "improper education or improper information." Waiting for an appointment or evaluation in a clinic the next day, or several days later, may be dangerous in certain circumstances.

It is vital that any athlete or parent who feels that they or their child are unwell after a head injury be evaluated by a medical professional. Very often this will involve a visit to the emergency department, where CT scanners and expert care can be obtained if required. An expedient visit to the emergency department is advised if the athlete is complaining of increasing headache, especially if localized; persistent vomiting; behavioural changes (becoming more emotional or agitated); becoming more drowsy (difficult to arouse); difficulty seeing, hearing, speaking, or walking; seizures; new confusion or disorientation (does not recognize people or places); or new onset of numbness or weakness in an arm or leg.

It should be noted that symptoms from a concussion may evolve and can worsen over hours and even the first few days after a

head injury.

As medical professionals who also work in the emergency departments of Montreal, we can attest that an evaluation of a head injury is first and foremost focused on ruling out life-threatening conditions, such as a bleed in the brain itself. After such conditions are ruled out, patients who are assessed and discharged from an emergency department should be given instructions and a follow-up plan.

Emergency departments see a large volume of concussion patients and are very aware that timely diagnosis and management result in a more positive outcome. Many provide comprehensive discharge information and an early referral to a concussion clinic. It has been proven that patients with a concussion heal faster when given follow-up care with health-care professionals specializing in concussion management. *J. Scott Delaney, MDCM, associate professor and research director, Department of Emergency Medicine, McGill University Health Centre; Debbie Friedman, Trauma Director, Montreal Children's Hospital; Vincent J. Lacroix, MDCM, assistant professor, Department of Family Medicine, McGill University, co-director, Primary Care Sport Medicine Program, McGill University, Montreal*