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I have some concerns regarding Tator's article in *CMAJ*.¹ Frequently, I see individuals who have been told that they have had a mild traumatic brain injury or concussion in the absence of any significant evidence that would support the diagnosis.

The following point appears in Box 4 of Tator's article:¹ "Any alteration of mental functioning after a blow to the head or body is a concussion." That blows to the body that produce pressure on the solar plexus can result in significant physical and mental dysfunction on a temporary basis is well known. Such dysfunction does not constitute a concussion. Individuals who experience a sudden unexpected traumatic experience can have an alteration in their memory and even experience frank amnesia. Psychogenic amnesia is one of the diagnostic criteria for post-traumatic stress disorder. In my opinion, one has to be cautious in attributing a concussion or brain injury to "any alteration in mental functioning."

I take great exception with another statement in Tator's article¹: "The presence of only 1 persisting symptom (e.g., headaches, dizziness, nausea and imbalance) qualifies as a concussion." The vast majority of headaches seen in clinical practice are not evidence of concussion. Dizziness has a multitude of causes, only one of which is concussion. Similarly, nausea can be seen after any number of physical injuries, not just concussion.

The notion of postconcussion syndrome is controversial. Meares and colleagues² state that "there is a high rate of acute PCS in both mTBI and non-brain injured trauma patients. PCS was not found to be specific to mTBI. The use of the term postconcussion syndrome may

be misleading as it incorrectly suggests the basis of the postconcussion syndrome is a brain injury." Similarly Chan³ studied a group of patients without head injury and found that a high proportion of these individuals reported symptoms that were a part of the symptom constellation of postconcussion syndrome.

I am not certain of how to proceed in the face of this contrary evidence, but I believe physicians need to be extremely cautious in making such a diagnosis. Removing athletes with a suspected concussion from play would appear to be prudent. However, I am increasingly concerned about the iatrogenic effects on patients who have received a misdiagnosis of concussion or mild traumatic brain injury.

Incidentally, I should note that in addition to the young being more susceptible to concussion, the elderly are much more susceptible to brain injury because of the brain atrophy that occurs with aging, which allows the brain more space to move around the cranial vault.

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Letters to the editor

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