When Treating Sport Concussion, Check the Boxes, But Also Go the Extra Mile

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Pick up a newspaper or watch the evening news or "Sports Center," and you're bound to read or hear something about sport concussion. The media are obsessed with this topic, particularly with the negative news that makes headlines and ultimately sells newspapers. Even so, there is good news to report, and progress is being made.

Although the neuroscience community has learned much about concussion in the last 2 decades, admittedly, we have much more to investigate and to understand. The tests for detecting concussion and tracking recovery are becoming more sensitive, especially when used in combination with other tools to create a multimodal approach to concussion assessment.

Despite all that has been accomplished, caring for athletes at risk for sustaining cerebral concussion has always been a challenging task and never more so than in today's litigious society. Concussion is different from other athletic injuries in that we still rely heavily on an athlete's subjective reporting of symptoms for decision making, and we lack the neuroimaging protocols that might allow us to see the damage and understand its severity. The cause-andeffect relationships, or lack of same, between repetitive head trauma and neurodegenerative diseases such as Alzheimer and chronic traumatic encephalopathy (CTE) are the subject of significant debate. Several published case reports have described τ protein deposits in the brains of deceased contact-sport athletes, but most of the neuroscience community does not believe that controlled experimental research has yet identified a causal relationship linking repetitive head trauma in sports and CTE.

Our responsibility is to safely care for our athletes, which includes educating them about what is known and unknown about the long-term effects of repetitive head trauma. Unfortunately, the large amount of misinformation on this topic sometimes results in hysteria rather than rational thinking.

Sports medicine clinicians can sometimes be overly focused on avoiding negligence, leading them to simply "check the boxes." This goes against our training and best practices. Concussions are like snowflakes: no 2 are alike, and no cookbook or calendar can specify exactly how they should be treated. Therefore, we need to go the extra mile. In many cases, it's a matter of counseling our athletes about the short- and long-term risks of not reporting symptoms, returning to play while still experiencing symptoms, and not modifying risky behaviors that can predispose them to

future concussions. No checkbox system can be applied to every concussion, and because concussions are diverse and unique injuries that affect each athlete differently, we must learn how to treat them individually. Likewise, concussed athletes are unique, and we must work to understand what makes them different. As athletic trainers, we sometimes forget the important role we play as counselor to our athletes. Getting to know each athlete's mindset and reaction to injuries allows us to build trust and forge honest lines of communications, thus enabling us to develop an appropriate and individualized plan for managing concussion, which is just as vital as knowing how to interpret the results of a cognitive or balance test.

Within a 6-month period, 4 major consensus or evidencebased documents focused on concussion management will have been released, 1 of which is published in this issue of JAT (originally published in the British Journal of Sports Medicine, March 2013): "Consensus statement on concussion in sport: the 4th International Conference on Concussion in Sport, Zurich, November 2012." This, along with other manuscripts published or soon to be published by the American Medical Society for Sports Medicine, the American Academy of Neurology, and the National Athletic Trainers' Association should all be mandatory reading for sports medicine clinicians because they will define the standard of care for athletic trainers and team physicians for at least the next 4 to 5 years. These documents are very well prepared and will make significant contributions to the sports medicine community. Although the documents share many themes, and many of the recommendations across the documents are consistent, they can leave the impression that checking the boxes is all we need to do to reassure ourselves that we have done our job when treating a concussed athlete.

In summary, I leave you a checklist:

- 1. Read these documents,
- 2. Develop and implement a sound concussion-management program and policy, and
- Check the boxes each time you manage a patient with concussion.

But just as important, be sure you go the extra mile to educate yourself and your athletes and to ensure that both you and your athletes are protected.

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