

Return To Play: Making the Tough Decisions

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"When can I play again?" is a question familiar to sports medicine physicians and increasingly to primary care physicians who treat active people, from the third-grade soccer player to the 70-year-old tennis enthusiast. Those who ask this question are often seeking a definitive answer--and usually hoping for a quick return to boot. Unfortunately, medicine is not always a craft practiced in black and white but is often an art with a palette in several shades of gray.

These shades of gray appear not only in the diagnosis and treatment of medical conditions, but also in the return-to-play decisions that physicians make. These decisions are particularly difficult in sports medicine--where so many of the return-to-play questions are being asked for the first time. For almost any medical condition, one can ask the questions: When is it OK for an individual with this condition to participate in sport? How does the condition affect the athlete's performance? How does exercise affect this medical condition?

It is important to recognize that often the answers are based on popular opinion and personal experience, because long-term clinical outcome data are scarce or nonexistent. Sports medicine practice has expanded beyond its primary focus of treating musculoskeletal injuries. We don't know a lot about the natural history of inflammatory bowel disease, bleeding dyscrasias, infectious diseases, diabetes, asthma, and many other medical problems that may affect the competitive or everyday athlete.

What's the Risk?

Consider the case of a young athlete who was cleared to play NCAA basketball despite a history of a subdural hematoma requiring surgical drainage at age 6. This clearance after his freshman preparticipation physical rested on the fact that the athlete had suffered no sequelae and had no further injuries during his intense high school competition.

During his freshman year, the player sustained two head injuries, the first without loss of consciousness but with posttraumatic amnesia, and the second, 2 weeks later, resulting in tinnitus and headache. The player redshirted but returned for practice 1 month later without complications.

The following season, he was hit in the head with an elbow during practice. Although the blow was relatively light, he lost consciousness and had posttraumatic amnesia and

retrograde amnesia that persisted for 7 days. Neuropsychological tests performed before and after injury were compared and showed significant deficits in certain areas of cognitive function. As his clinical signs improved, his test results improved in parallel, such that at 1 month he was close to baseline function.

What do you tell this athlete ?

Given his history of injuries, the severe deficits that occurred in response to what appeared to be a minimal force, and the impressive persistence of his deficits, there was substantial concern for this athlete's propensity for further injury. There was also concern that if he did sustain another injury with similar deficits, he might not recover fully. Given these concerns, our medical staff decided not to allow him to return to play. But was it the right decision?

Published recommendations (1-6) on concussion and second impact syndrome agree only that symptomatic athletes should not return to play. Is there any amount of time away from competition that would change whether or not this athlete could safely return to play? The guidelines that exist are just that, *guidelines*. Because there are so many variables to consider, the guidelines are often difficult to apply in individual cases.

If we could predict the future, these decisions would be easier. The athlete in this example transferred to another university, where the physicians cleared him to play, and he had an uneventful season.

Increasing Complexity

This case shows the difficulties of making return-to-play decisions. Physicians need to assess several factors, including the athlete, the sport, and the medical condition.

More diverse participants. The meaning of the term "athlete," happily, has expanded to include younger children, older adults, the physically challenged, and individuals who exercise to maintain or improve their health. Consequently, the concepts of "sports" and "sports-related conditions" have changed as well. The Americans With Disabilities Act of 1990, for example, has required physicians to readdress some traditional activity restrictions.

Making decisions for amateur athletes, especially children and youth, raises special issues. Unlike professionals, amateur athletes may not fully recognize the risks inherent in sports and may simply rely on regulations *and physicians* to create a healthy environment. Coaches and many administrators don't or can't hold the health interests of the athlete as a first priority, but physicians, athletic trainers, and other healthcare providers must do so, despite pressures to do otherwise.

Parents don't always put health risks in perspective, either. The image of highly paid professional athletes, combined with more professional sports opportunities for men and women and the growing number of organized sports for children, can create pressures on young athletes to excel and "specialize." Parents may pressure medical personnel to allow

their child to play in "the big game" if doing so might help his or her athletic prospects. In addition, "playing through pain" is an image many athletes, even junior high athletes, strive to emulate.

Questionable influences. Media publicity can affect patients' expectations and further complicate return-to-play decisions. A US downhill skier in the 1998 Winter Olympics provided a case in point. She admitted on national television that she was competing despite a head injury the week before that had caused her to lose consciousness for 20 seconds and was still causing headaches and dizziness during trial runs. Her example may have sent the unfortunate message that athletic competition despite symptoms is risk-free and "what it takes" for Olympic success.

Another example is the athlete who sustains an anterior cruciate ligament (ACL) injury and has reconstructive surgery. Most of these athletes require 6 to 9 months of rehabilitation before returning to competition. However, the recent shift to returning some high-profile athletes to competition after 3 months prompts some patients, especially at advanced levels, to seek assurances that they, too, can safely follow the same short timeline.

Back to Basics

We need to be aware of the many factors that play a role in determining when it is safe for our athletes to return to play. Clearance decisions are freighted with complex issues that force us to define our basic principles. I offer mine, hoping that they will contribute to a more effective practice of our subtle art:

- Always put the patient first.
- Understand the medical or musculoskeletal problem. If the issue is unclear or more information is needed, seek consultation. Though our active patients' return-to-play issues are difficult, they correctly remain in the domain of primary care physicians in conjunction with appropriate consultants. If your patient is seen by a consultant who is not familiar with his or her exercise regimen, consider asking the consultant specific questions for the patient or explaining what the patient's athletic endeavors require.

Understanding our patients' individual concerns can allow us to explain to them what is known regarding their particular problem and allow them to make well-thought-out decisions. Though consultants may know the specifics for a particular disease, they may not be familiar with the goals of patients, especially in their athletic endeavors. That is where our role as primary care providers can be pivotal.

- Treat each patient as an individual. Don't assume that an athlete wants to play. You may be surprised to hear the answer, but you won't know unless you ask. Consider the sport, level, and goals as well as the disease or condition. For a patient who has infectious mononucleosis, playing golf and tennis may pose little risk, while playing football may pose much. If the problem is an ACL-deficient

- knee, what makes sense for a swimmer or sprinter may not make sense for a football, soccer, or basketball player.
- Evaluate the risks of return to play, and if any is significant, rethink the decision to allow an athlete to play. We are not in a competition to see who can return an athlete to competition fastest. Our responsibility is to help patients resume activities safely. To do so, we must understand how exercise will affect the injury or illness and how the condition will affect participation.
 - Above all, ask questions. Is the patient's age relevant? Does a well-established sports medicine principle apply? Will a medication cause harmful side effects? Will a test change a patient's treatment? Being critical of your own decisions is the key to making the right ones.

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