Sports medicine providers, especially those privileged to function as team surgeons, can at times be faced with an interesting dilemma. The truth is our livelihood seemingly depends on injured athletes. Our clinic and operating room schedules fill up during the height of sports seasons with athletes hoping that we can help get them back in the game. Most of us grew up as participants and fans of the games we are now covering. After hours of dedicated sideline and training room coverage, we feel a bond with our athletes and we hope to see their teams succeed. That success is occasionally dependent on an injured athlete’s quick return to play. On the other hand, we have a responsibility to protect these athletes from unnecessary risks and the potential burden of long-term musculoskeletal dysfunction.

The burden of musculoskeletal disease manifests itself in a variety of ways. In the sports world, injuries to our favorite athletes are well documented. For the competitive or recreational athlete, injuries are similarly common. Even injuries that do not require surgery can impact sports participation. For example, huge numbers of our youth athletes suffer from overuse injuries. One estimate places the number of youth sports injuries at 3.5 million, with 50% being overuse injuries. Unfortunately, an overemphasis on competition, specialization, and a win-at-all-costs mentality contributes to this phenomenon. Increased specialization in organized sports does not increase the likelihood of athletic success, but it does potentially place extra stress on still developing bones, muscles, and joints. In baseball, for example, there are well-established guidelines for pitchers. Despite recommendations against the practice of pitching while in pain or fatigued, a recent study reported that more than 70% of youth athletes experienced arm pain related to throwing and 46% reported being encouraged to keep throwing despite their report of pain.

Certainly, many adults balk at the idea of “overuse injury” and argue that today’s youth are “underused.” In fact, time previously spent outdoors participating in “traditional games” and free play has been replaced with an average of 7.5 daily hours of screen time for children aged 8 to 18. And although 45 million children participate in youth sports, by age 15, 70% to 80% are no longer active. Attrition from sports is certainly multifactorial, but if injuries play a role, those of us providing care for the injured athlete must strive to allow our young patients to continue to benefit from sporting activities. Youth sports do have tremendous benefits from fitness, psychological, and social perspectives. These benefits include improved health, decreased depression, and improved academic achievement. Furthermore, developing a lifelong love of fitness can potentially help stem the tide of adulthood obesity. Currently, two-thirds of the adult American population is overweight or obese. Any surgeon would attest that obesity negatively impacts our current state of musculoskeletal care.

We must ask how we can be advocates for musculoskeletal fitness while simultaneously protecting our young athletes. How can we help reverse the trend of decreased participation? How can we encourage musculoskeletal fitness and continue to protect our young athletes?

In my opinion, setting realistic expectations is key. The fact is, the vast majority of young athletes will not earn scholarships and will never participate professionally. For example, out of almost 1.1 million high school football players, only 6.5% would...
play collegiately. Only 1.6% of those college players are ever drafted by the National Football League. If patients and parents have unrealistic expectations about the likelihood of achieving athletic success, they can push too hard. An emphasis on treating injuries after they occur and the false representation that we can “make you as good as new” gives coaches and parents the idea that they have carte blanche to push their young athletes harder and harder. When injuries do occur, team physicians must be sure that they are part of the solution, not part of the problem. We must be sure we do not “enable” parents and coaches to make decisions that have potential short-term benefits, but carry long-term risks.

Unfortunately, I have seen patients undergo meniscectomy when meniscal repair was possible solely so the athlete could return to sport more quickly. I have heard too many stories of team doctors allowing teenagers to return to play despite significant risk of longer-term injury simply because the game was viewed as “more important.” I have seen several teenage patients in my office who received sideline local anesthetic injections and were allowed to return to the game only to suffer recurrent injury. I would argue that a teenager cannot really give “informed” consent for pain medications or nerve blocks in the game setting. The pressure to return is already great, and we must not add to that pressure. We must be sure that we do not allow our fandom to cloud medical judgement. It is truly sad to have a patient or parent report to me that a “team physician” allowed a potentially concussed athlete to return to a game because “it was the championship,” or to hear about high school athletes being given pregame Toradol injections so they could help the team in a “big game.” Certainly instances arise where athletes can return quickly after an injury, but we must remember the long-term goal of continued musculoskeletal health. We must ask ourselves whether the return to play results in a high likelihood of recurrent injury, and if that happens, what are the consequences. Allowing parents and coaches to place expectations on young athletes that mirror those placed on professionals often times results in further attrition and, ultimately, the possibility of a continually inactive and unfit adult population.

The implications of significant injury are well-known in the short term, and even casual observers recognize when a relative or favorite player misses time due to an injury. Fantasy sports leagues obsess over “return to play” time lines and prognoses. Historically, returning from a significant injury was viewed as a triumph. Currently, advances in diagnostics, surgical treatment, and the rehabilitation process, combined with the almost “superhuman” abilities of some athletes, have resulted in an expectation of return to sport without a concomitant drop in performance.

Unfortunately, what our patients see on television is not necessarily the actual outcome of their or their loved one’s injuries. For example, consider injuries of the anterior cruciate ligament. Many patients expect the same outcome as Adrian Peterson, who returned from this injury after 8 months and nearly broke the National Football League season rushing record. In reality, multicenter studies have shown lower rates of return than one might expect. High school and college athletes returned to football at rates of 63% and 69%, respectively, but only 43% were able to return at the self-described same performance level. A recent large review of more than 7500 patients showed a return to competitive sports at 55%. Even more concerning is the possibility that surgical reconstruction of the anterior cruciate ligament, while allowing improved activity as measured by Tegner score, might not provide long-term protection from degenerative change.

So although a myriad of authors and researchers continue tremendously important work on surgical techniques, outcomes, and basic science, one must ask whether the layperson really understands the impact of a significant sports injury. Furthermore, we must question how team physicians can appropriately educate athletes and families so as to lessen the long-term burden of musculoskeletal disease.

As specialized providers of musculoskeletal care, team physicians have the opportunity and duty to educate young athletes as well as their parents and coaches to help them understand the importance of lifelong physical activity and to advocate for prevention of youth sports injuries and burnout. Athletics carry significant benefits, but also risks. When injuries do occur, we owe our patients the care that provides them with the best opportunity for lifelong activity and participation, not simply the care that allows them to play as quickly as possible.

What is our responsibility? I routinely tell high school athletes that my job is not to get them back for the next quarter or game, but to be sure that they can play with their own children someday.

**REFERENCES**

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