vol. 8 • no. 4 SPORTS HEALTH

## [ Editorial ]

## **Bouncing Back**

hen an injury forces an athlete out of training and/or competition, the return-to-play (RTP) decision-making process may be simple or multidimensional. When analyzing these situations, an important factor to consider is why the injury occurred in the first place. Was the injury a result of an unavoidable trauma, such as a hit to the knee in a contact sport, or the result of fatigue or poor conditioning? Analyzing the causative factors, if they can be identified, may prevent a recurrence.

When injuries require surgery, the preoperative preparation of the athlete may require days, weeks, or months. Sensing the athlete's physical and psychological preparedness is an important aspect of surgical care. Failure to detect those not prepared can complicate the recovery process from the start. During the rehabilitation phase, postsurgical testing often exposes significant deficiencies in the noninjured extremity that can improve the athlete's risk factors and performance. Examining both the injured and noninjured extremity may well be worth the time and effort.

Spending time with the athlete and possibly the team athletic trainer, coach, or family members may identify obstacles to a successful return to sport. As this process evolves it may become obvious that the choice of sport was not ideal and that the athlete may need to switch to a more compatible endeavor. Making a long distance runner out of a flat-footed, valgus knee individual with a body mass index of 35 kg/m² may not be possible. Similarly, some undersized football players with repeated concussions or stingers may need to reconsider their athletic pursuits.

As musculoskeletal specialists, it is easiest to focus on what we know best about the injured body part. However, missing psychological/emotional factors can pose problems for us and the athlete. Considering those factors before surgery and making sure that the athlete is ready for the increased rigors of postoperative rehabilitation is critical. Adjusting to the injured status may take time for the athlete even when it seems that everyone involved wants to move ahead with surgery and rehabilitation as soon as possible. For many athletes, their physical ability and wellness is central to their identity. When this persona is shattered, even the best athletes will struggle. This time sequence between injury and recovery can be highly emotional as the athlete struggles to conceal the fear and

uncertainty hidden deep inside. Anger may surface even in the most well-rounded players. The musculoskeletal clinician should anticipate these undertones and should remain vigilant for signs that the athlete is not adapting and may benefit from professional help. Recognizing this scenario can not only salvage the rehabilitation process but also possibly the athlete's career and life.

Early in my own team physician career, I didn't recognize the emotional status of one of the most talented tailbacks I'd seen handle the football. This player's speed and deft moves often left linebackers clutching the air as they failed to tackle him in the open field. Unfortunately, a blindsided hit at the knee on a punt return left this athlete with a major knee injury. His life came to a crashing halt as he withdrew from his teammates and support structure, leaving him depressed. While the athletic staff knew he was struggling, we just didn't realize how badly he was hurting inside. He had never experienced a serious injury and didn't possess the means to compensate for this threat to his athletic career. Fortunately, his knee responded well to his surgical procedure—no doubt due to his tremendous athletic ability. Sadly, he never competed in organized sports again, even when opportunities at the collegiate and professional level surfaced. He never recovered from the substance abuse problems that he slipped into after his injury and subsequent depression. That episode has had a long-lasting effect on me. I wish I knew then what I know now. The depression that can follow a serious athletic injury can be much more serious than torn ligaments or fractures. I have often wondered what I could have done to change that unfortunate course.

While the last case is an extreme example, I am sure there are many similar, although maybe not as severe.<sup>3</sup> As a clinician, if we get to know our patients well, we may be able to help them recover in more ways than one. On the physical side, assessing range of motion, strength, and functional return is the easy part. Objective evaluation through testing helps both the clinician and patient make appropriate decisions. Individual variation may make generalizations impractical, and individual athletes may not be comparable.

RTP decisions often benefit from input from several sources, especially when athletes of minor age are involved. These decisions require an assessment of risk that is injury- and sport-specific. It's extremely important for the clinician to

SPORTS HEALTH Jul • Aug 2016

establish the threshold of acceptable risk and to discuss the assessment with the appropriate stakeholders, which may include the athlete alone, the parents/guardians if the athlete is a minor, or involve many others depending on the circumstances. This risk assessment no doubt varies with not only the type of injury but also the age, mental capacity, and level of play of the athlete. Caution should be the greatest with the youngest and most vulnerable patients playing the highest risk sports. Returning a teenager to play a contact sport after a cervical spine injury can be a challenge for even the most experienced clinician. At higher levels of play, a lot more is determined by the athlete, albeit with the clinicians input. Recognizing these differences in risk assessment and assumption of risk between minors and adults and high- and low-risk sports is an important role for the team physician. Knowing who the legitimate stakeholders are for the athlete is crucial because coaches and other team officials may not be. No doubt some sports carry significant risk regardless of the health status of the athlete, making these decisions even more challenging.

Motivation is a key factor to consider in RTP decisions because it can overcome many disabilities and fears; it can be a very positive force through the low points of rehabilitation. It can also cloud the RTP decision-making process and lead to unwise shortcuts. Clinicians who can sense the level of this force, both positive and negative, can help place it into proper perspective.

For the team physician, returning an athlete to the field of play shouldn't end with the physical examination and functional testing. Failure to adequately assess the athlete's psychological, emotional, and motivational status can expose the athlete to more serious problems.

To help clinicians with RTP decision making, there are 3 reviews in this issue of *Sports Health* dealing with 3

interesting topics. The review by Begly et al<sup>1</sup> of Jones fractures in the National Basketball Association (NBA) addresses a difficult but not uncommon problem for NBA players. Thankfully, as this review highlights, most players can return after a Jones fracture without a decrease in performance. Similarly, the review by Robertson and Wood<sup>4</sup> discusses the benefits and risks of operative and nonoperative treatment of tibial fractures and the implications of these treatment options for RTP. Interestingly, there are significant possible benefits with surgical fixation, but not without added risks. Last, the review by Christman and Li<sup>2</sup> on return to sports after spinal injury for pediatric patients addresses a real void in terms of RTP guidelines, stressing the need to individualize each player's pathology and sport.

Together, these reviews add to the team physician's knowledge base for RTP decisions after musculoskeletal injury. Hopefully we can make similar strides in our psychological/emotional evaluations as we strive to provide the most appropriate care for our athletes.

—Edward M. Wojtys, MD Editor-in-Chief

## REFERENCES

- Begly JP, Guss M, Ramme AJ, Karia R, Meislin RJ. Return to play and performance after Jones fracture in National Basketball Association athletes. Storts Health. 2016;8:342-346.
- Christman T, Li Y. Pediatric return to sports after spinal surgery. Sports Health 2016;8:331-335.
- Garcia GH, Wu H-H, Park MJ, et al. Depression symptomatology and anterior cruciate ligament injury: Incidence and effect on functional outcome. Am J Sports Med. 2015;44:572-579.
- Robertson GAJ, Wood AM. Return to sport after tibial shaft fractures: a systematic review. Sports Health. 2016;8:324-330.