

GETTING BACK IN THE GAME: Returning the Patient to Activity

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Injuries and the need for surgery can occur in all patients. Athletes are not the exception, but the demands of their activity and desire to return to activity often drive a portion of their treatment plan. When these situations occur, it is important to lay out a treatment plan that will allow resolution of the symptoms and allow return to function while at the same time limiting long-term complications. Although the goal for treating all patients is the same, the time line, and the specifics of maintaining fitness while returning to normal function will differ from patient to patient. Athletes have different expectations and are often more motivated to return to high levels of function. This can be both a benefit and a hindrance to their healing. An appropriate understanding of the athlete's goals and expectations is essential to developing an effective treatment plan.

UNDERSTANDING THE ATHLETE

Everyone has passions, for some it is watching football, for some coaching football, and for some it is playing football. People can be observers, supporters, or participants and the demands on the body are different for each. For the athlete the goal is to be a participant and to push their body to the highest level. This is an admirable goal, and although not adopted by all, it must be understood to be able to treat those who want to play basketball, run 26.2 miles, play tennis once a week, or a participate in a variety of other athletic endeavors. The difficulty occurs when this passion runs directly into a fracture, tendon rupture, or need for surgery (elective or not). The athletes' mindset is to keep going and keep pushing forward while the physician's desire is to put on the brakes and give the body the rest it needs to heal. The time line for healing often cannot be rushed and this is where true patient management comes into play. The desire to return to activity or training may over-ride what is considered common sense and this must be managed to prevent further injury to the athlete.

The simplest way to describe the approach to how an athlete thinks is the saying "What doesn't kill you makes you stronger." Athletes do not want to stop training. Therefore an injury they can not see such as a stress

fracture does not instill in them the need to stop activity. The physician's role must be one of protecting the athlete from further injury, and this sometimes means making the tough decision to tell them to stop their activity. Explaining the risks of continued activity or too early a return and the potential for even longer downtime may help convince an athlete of the appropriate treatment plan. Working together and maintaining open communication will assist in progressing the athlete back to activity appropriately.

REALISTIC EXPECTATIONS

Our expectations in treating patients are for them to get better and return to a level of function equal to pre-injury activity. The athletes' expectation is to return to pre-injury activity as soon as possible and not lose any time in training or lose any of the skills they have developed. A meshing of the two must occur, and communication is the key to fostering this plan. Understanding the patients' expectations and their ability to understand what the treatment plan requires are two essential ingredients. Most athletes know and understand their body well and want to understand what happened or is going to happen and a relative idea of how long it is going to take to recover. When dealing with stress fractures or acute fractures, an injury has occurred. A general time line can be established based on past experience. Tendon injuries may have an extended time line, as do sprains and strains depending on the severity of the injury. When surgery is involved it is important to detail to the patients the initial limitations as well as the normal complications that may occur including stiffness, edema, and residual pain that may often delay their return to function. This may be very frustrating for the athlete, but if expectations are aligned and protocols developed, progress may be made and some level of fitness may be maintained.

ACTIVE REST

Active rest may seem like an oxymoron. When an injury occurs, a period of rest must come into a portion of the treatment plan to allow stabilization of the injury and to prevent further progression of the injury. This is clearly

evident with a stress fracture that can be treated with immobilization prior to the completion of the fracture by an athlete who wants to continue to compete. The athlete needs an outlet, not only for their physical well-being, but also for their mental well-being due to the fact that in some cases their personality and life is tied to their athletic endeavors.

Active rest allows the part that is injured to rest while fitness is maintained through alternative methods. This is done through the principle of cross training, or the implementations of other activities. Many methods of active rest are available and can be adapted depending on the injury. A stress fracture must have the stress removed but does not require someone to just sit. For example a runner with a stress fracture has the following alternatives: swimming, elliptical trainer (pushing through the heel and not through the forefoot), aqua-jogging (running in the deep end of the pool while wearing a floatation device to simulate running without the stress because water has over 700-times the resistance of air and therefore fitness and strength are maintained [Figure 1]), cycling or spinning (insuring the athlete is staying in the seat to eliminate the driving pressure), and weight-training.

Many of these activities can be modified and used during the postoperative period following many forefoot surgeries. It may require shoe modifications and activity modifications to insure someone does not do too much too soon. A detailed list of what activities are acceptable should be described to the patients and explained. Often, the terms impact and nonimpact activities are used.

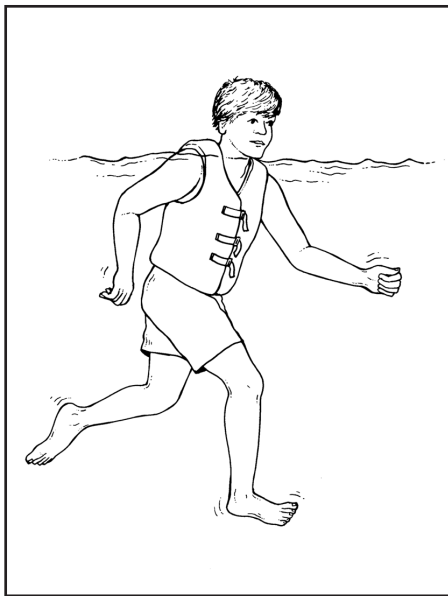


Figure 1. Aqua-jogging in a pool with the use of a life-vest allows continued activity to maintain fitness without stress on the injured extremity.

Running, aerobics, fitness walking, and many sports are impact activities, and the activities described above (swimming, cycling, elliptical, etc.) are nonimpact and can be initiated much earlier without risk of further injury.

This phase of active rest takes the athlete from immobilization (stabilization) through maintaining fitness while the injury or surgical site appropriately heals. This time should also be used to determine the underlying etiology of their condition (assuming it is not an acute fracture or rupture). Issues such as osteoporosis, nutrition, biomechanical abnormalities, and equipment or training problems can be addressed. It is important to identify these issues early in this phase so that when the athlete is ready to return to activity they do not need to wait for further evaluations. Biomechanical assessment, osteoporosis screening, and nutritional consults are often timely during this period. Developing a plan for return with both the athlete and coach and having the opportunity to gradually implement it during this stage will help as the athlete progresses.

RETURN TO ACTIVITY

Returning an athlete to activity is the goal of all treatment. One of the biggest mistakes that can be made is to attempt to return them to their activity of choice either too early or too quickly. Many physicians tell their patients to “take it easy” but unfortunately this is very vague and the competitive athlete often does not know how to accomplish this safely. By developing a plan to return the athlete to their desired level of competition and working with them to regain their training and competitive form, the risk for reinjury is significantly reduced. The most effective method of returning to activity is to begin to stress the body and the healing limb while allowing time for recovery. This can be done through a variety of methods but must be developed as a progression and the athlete must understand the need for patience in their return. Active rest is a large portion of the return to activity because it gives the athlete the alternative activities to focus their energy and maintain fitness as they return to the activity they are training for.

A major component of most athletic activities is running, and the following example outlines the return to running activity. One key in rehabilitating athletes is to remember that other aspects of their sport may still be effectively performed (free-throw shooting, weight lifting, catching) without the need for significant stress on the lower extremity, and should be encouraged. Returning a runner to running should begin with active walking to begin to place stress on the body. If any limping occurs,

the activity level should be decreased so as not to cause compensatory injuries. A written plan allows the athlete to see the weekly goal and to have a guideline to work up to. A 2-week walking program should begin on an every other day basis. The next stage is running every other day using a combination of running and walking (popularized by Jeff Galloway). I recommend runners start with 5 minutes of walking followed by 2 minutes of running for a specified time or distance which is kept constant through the return process. The next week begins a 3 minute run and 3 minute walk followed by 5 minutes of running and 2 minutes of walking the following week. The final week of the progression is full running on an every other day basis. Once this stage of running is reached the athlete may begin to work on their own or with a coach with a return to training and activity. If running is a part of their sport, then a full return to activity is possible at this time based on their rehabilitation.

The athlete should continue to be monitored for healing through clinical and radiographic evaluation. Retraining of the body in their competitive endeavor is important to prevent recurrence of the injury. It is important to discuss the normal pain that may occur with osseous or soft tissue injury so that patients will have an understanding of what is and is not a concern. Returning to full activity may seem like a slow progression for the

patient but through effective communication and providing alternative fitness maintaining activities the athlete can return to full activity with limited downtime.

Injuries are difficult for all patients to deal with due to the limitation of normal daily activities. When these same injuries or surgeries occur in athletes, the normal activities take on a completely different meaning, because the demands on the body are much greater with athletic activities. It is essential to be able to not only diagnose these injuries but to also provide opportunities for active rest and a progressive return to activity so that there is a coordination of the patient's expectations and the physician's expectations to allow this normal return to activity.

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