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Orthopedic Injuries in Athletes

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Orthopedic Injuries Within Athletes : Knee and Joint Injuries.

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Basis

Athletes run the risk of suffering injuries whether during games or practice. These can be injuries such as trauma, strains, bruising, contusions, or tears. It is correct to assume that an athlete cannot avoid injuries in various instances when playing whether they are professional athletes or simply hobbyist playing any type of sports. Numerous studies have gone into the exploration of orthopedic injuries to discover the various issues that surround injuries in athletes along with the prevention of injuries.

Types of Injury

Musculoskeletal injuries which are injuries to any muscle or joint within the body are the most common injuries within an athlete, with injuries to the knee region leading. A study conducted by Nicolini Et al (2014) observed the different types of common knee injuries an athlete can experience. Outpatient clinics of a sports trauma center obtained data based on gender, age and diagnosed injury and the results obtained from this study indicated that injuries can be sustained in all sports in varying proportions. It was observed that within all sports, 34.7% of ALC injuries were associated with meniscal injuries, 6.2% were associated with MCL injury, 2.4% association with PCL injury and 3.7% associated with the chondral injury. Among these injuries there are various types of other injuries that may be experienced in athletics, they include; physeal injuries and growth disturbance, apophyseal injuries and growth disturbance, spine pathology, knee injury, shoulder injury, and osteoarthritis.

Treatment/Care

Numerous treatment options are available in which the different injuries of athletes can be treated depending on the type of injury. These processes at times may make use of biological self-healing techniques of the body itself or simply medical interventions that may include surgery. According to Baoge et al (2012), most types of muscle injuries follow three stages: the acute inflammatory and degenerative phase, the repair phase and the remodeling phase (p. 1). It is also observed that “present conservative treatment such as RICE (rest, ice, compression, and elevation), nonsteroidal anti-inflammatory drugs (NSAIDs) and rehabilitation and physical therapy" are available options as well but being that they are conservative methods they may not always work for extreme injuries. For example, Anterior Cruciate Ligament (ACL) injuries are a type of injury that requires surgery to promote the best recovery but has several ways in which it can be treated as stated by Hewett et al (2012).

Prevention

According to nsmi.org (2009) “the most important reason for doing a warm-up is to prevent injury during exercise; keeping the muscles warm will prevent acute injuries such as hamstring strains and will stave off overuse injuries by allowing the body to prepare steadily and safely”. Warming up helps to prepare the body for higher intensity exercises by gradually increasing the intensity of the exercises along with your heart rate. This sequence helps to loosen the joints and increase blood flow to the muscles. A typical warm-up lasts up to about 20 minutes, and no longer than 30 minutes, but most importantly once your muscles have been properly warmed up it is important to keep them loose and warm. This is so the blood circulation throughout the body stays constant because most injuries tend to occur once an athlete’s muscles cool.

Restorement

The rate of return to a sport following ACL reconstruction in athletes was 83%, which is a very promising value. When looking at sports such as soccer and football the return to play rate among soccer players was 85% and among football players the return to sport rate was 78%. If the right rehabilitation and precautionary measures are taken, almost 90% of the time an athlete can return to a sport normally. However, an athlete must remain aware and cautious of their participation in any sport after an orthopedic injury as the chance of re-injury is great.

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