ISSN: 2456-043X

International Journal of Engineering Science and Generic Research (IJESAR)
Available Online at www.ijesar.in
Journal Index In ICI World of Journals - ICV 2016 – 68.35
Volume 9; Issue 3; May-June; 2023; Page No. 14-22

Treating an Athlete with an Acute Lateral Ankle Ligament Injury

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Abstract

About 25% of all musculoskeletal system injuries are inversion injuries, and 50% of these injuries are caused by sports. This article examines acute lateral ankle injuries with a focus on why treating these injuries in sportsmen is important. Using Pubmed/Medline, Ovid, and Embase, a narrative review was conducted. We included and evaluated articles on the subject. One ankle inversion injury happens daily for every 10,000 persons, according to estimates. 7–10% of all admissions to hospital emergency rooms are for ankle sprains. A quarter of all musculoskeletal system injuries include inversion injuries, and half of these injuries are caused by sports. The anterior talofibular ligament, calcaneofibular ligament, and posterior talofibular ligament make up the lateral ankle ligament complex. Supination and adduction (inversion) of the plantar-flexed foot are the most typical trauma mechanisms.

Keywords: *musculoskeletal, Ovid, Sports, Ankle, Ligament, posterior*

INTRODUCTION

A person's capacity to do well in sports is solely determined by his or her capacity to carry out certain physical procedures or activities under stress. There are many instances of this, including in sports like volleyball, basketball, football, and others where the player must be able to hit the ball in the air, throw it a long way, clear a crossbar, and more. High levels of technical and tactical competence are essential in sports. By mastering the skills of the sport, one may increase their ability to perform better in sports. How effectively a person performs is influenced by a complex interaction of physiological, psychological, and cultural factors. Fitness components are necessary for consistent practice and performance development. Ankle sprains account for around 14% of all sports injuries, or one injury per 17 participants each season. This percentage is substantially higher—25%—in high-risk sports like jumping and running. Ankle sprains have been reported to occur more commonly, 24 times more frequently in the dominant leg, and have a high recurrence rate (73.5 percent). The talus, tibia, and fibula, which all articulate at the surface of the tracheae, are the three bones that make up the ankle. The fibula bears between 15 and 20 percent of the body's weight. It moves lower and laterally to improve ankle mobility and stability during the stance phase of running. According to this research, a fibula position change of a few millimeters may result in a 40% increase in joint forces.

Tarsal tunnel syndrome (TTS), a disorder that is often caused by tibia nerve damage in the posterior medial ankle, is rare. Post-traumatic factors are often connected to the calcaneal or ankle joints. Compared to carpal tunnel syndrome, tarsal tunnel syndrome affects more middle-aged athletes and has a wider variety of possible causes. Only daily and sporadic discomfort and a burning feeling on the sole while standing, walking, or running for a lengthy period are chronic symptoms. Frequently, interdigital neuromas are misdiagnosed, resulting

in patients having surgery only to have their symptoms come back. Electromyography and nerve conduction velocity studies may be used to look for symptoms of entrapment or injury in the posterior tibia nerve, which divides into the medial and plantar nerves. The most frequent causes of foot strain are plantar flexion and inversion. In addition to the signs of an injured lateral ankle ligament, tarsometatarsal strain also generates pain in the fourth and fifth tarsometatarsal joints. X-rays of the back may only show chip fractures. Crutches, NSAIDS, and a bandage are used to treat the acute injuries. If physical therapy involves hydrotherapy, power training, and use of foot ankle exercise boards, an ankle brace may be needed when the athlete returns to the field to help prevent plantar inversion. If symptoms persist, bone and CT scans may be used to rule out stress fractures and arthritis. Sub talar strain is indicated by tenderness in the sinus region. Here, a similar strategy is used.

ACUTE ANKLE SPRAIN IN ATHLETES: CLINICAL ASPECTS AND ALGORITHMIC APPROACH

The occurrence of acute ankle injury is quite widespread within the realm of musculoskeletal ailments. The occurrence of ankle sprain is quite prevalent among those who engage in physical activity, making it the most often encountered lower limb injury. In Western nations, the incidence rate of ankle sprains is around one per 10,000 individuals per day. Furthermore, the combined number of ankle sprains treated in emergency rooms in the India and India reaches over two million cases yearly. In the realm of sports, the prevalence of this phenomenon is notably elevated, constituting a range of 16% to 40% of all reported instances of trauma associated with sports activities.

Around 40% of traumatic ankle injuries and close to 50% of ankle sprains happen during athletic activities. The sports with the highest occurrence of ankle sprains are basketball (41.1%), American football (9.3%), and soccer (7.9%). Ankle sprains are more common among females, children, and athletes participating in indoor and court sports.

In addition to the osseous and myofascial components, the ankle joint's stability is significantly influenced by several ligaments, which are anatomically dispersed in the lateral, medial, and syndesmotic regions (refer to Figure 1.1).

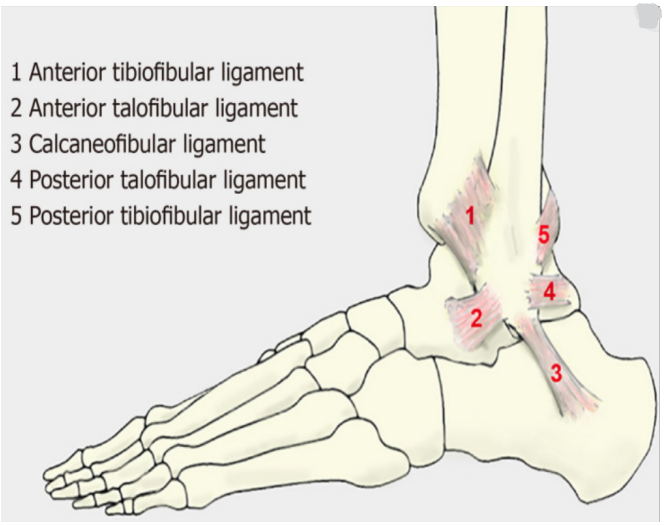

Figure 1.1 Lateral ligaments of the ankle

The lateral ligaments are involved in around 85% of ankle sprains. Approximately 65% of instances include a singular damage to the anterior talofibular ligament (ATFL), whereas in 20% of cases, both the ATFL and the calcaneofibular ligament are injured. Incidences of posterior talofibular ligament injuries are few. The remaining 15% of ankle sprains include syndesmotic and medial ankle sprains. A syndesmotic ankle sprain refers to the damage

sustained by the ligaments that make up the distal tibiofibular junction, sometimes referred to as a "high ankle sprain".

Despite being quite prevalent, the long-term prognosis of an acute ankle sprain is not positive, with a significant number of patients experiencing chronic residual symptoms (up to 40%-50%) and recurring injuries. Moreover, there is a significant incidence of undiagnosed injuries related to ankle sprains, including tendinous and osteochondral injuries, as well as midfoot fractures. Hence, the management of lateral ankle sprains and its subsequent consequences incurs significant socioeconomic burdens in terms of both direct and indirect financial and social expenses.

STATUS OF LIGAMENT ANKLE INJURIES AMONG PLAYERS

Ligament injuries, primarily those affecting the ankle, are often seen in athletes, particularly those involved in sports that include rapid changes in direction, cutting maneuvers, and leaping activities. The ailments have the potential to have a substantial influence on an athlete's overall performance and professional trajectory. Gaining insight into the present state of ligament ankle injuries among athletes is crucial for the successful implementation of preventive measures, accurate diagnosis, and efficient rehabilitation strategies.

Epidemiology

In the realm of sports-related injuries, ligament ankle injuries emerge as a prevailing occurrence. According to statistical data, it has been observed that on a daily basis, an estimated 25,000 individuals in the Indias get ankle sprains. Within this group, a significant proportion is comprised of athletes, including those who engage in sports activities at both amateur and professional levels. Soccer, basketball, volleyball, and football are sports characterized by a notable incidence of ankle ligament injuries.

Risk Factors

There are several variables that contribute to the susceptibility of athletes to ligament ankle injuries.

1. **Sport Type**: The inherent characteristics of the activity, including the specific requirements placed on the ankle joint, have a substantial impact on the likelihood of sustaining injuries. Sports characterized by frequent cutting and pivoting movements, such as soccer and basketball, have a heightened prevalence of ankle injuries.
2. **Previous Injuries**: Individuals who have a prior record of ankle injuries have an increased susceptibility to experiencing recurring injuries as a result of ligament laxity and changes in biomechanics.
3. **Footwear**: Insufficient footwear or inappropriate selection of shoes might heighten the susceptibility to ankle problems.
4. **Playing Surface**: The playing surface, whether it grass, turf, or hardwood, has the potential to influence the risk of injuries. There is a potential correlation between the presence of hard surfaces and an elevated likelihood of sustaining high-impact injuries.
5. **Player Skill Level**: Inexperienced individuals who are new to a particular sport or activity may have a higher susceptibility to sustaining injuries as a result of their limited knowledge and practice in executing appropriate movement strategies.

LITERATURE REVIEW

Farzin, Halabchi & Hassabi, Mohammad (2020) Acute ankle sprains account for 16%–40% of all sports-related injuries and are the most frequent lower limb injury among athletes. It is particularly prevalent in soccer, American football, and basketball. The lateral ligaments, especially the anterior talofibular ligament, are the most often injured. Despite its great frequency, a large percentage of patients have ongoing residual symptoms and recurrent injuries. The pillars of diagnosis are a thorough history and an appropriate physical examination. Most ankle sprain patients do not need imaging, and Ottawa ankle regulations should be followed when making this request. For the treatment of acute ankle sprains, several interventions have been suggested, including rest, ice, compression, and elevation (RICE), analgesics, anti-inflammatory drugs, bracing, early weight-bearing, walking aids, foot orthoses, manual therapy, exercise therapy, electrophysical modalities, and surgery (only in certain refractory

cases). Among these interventions, exercise and bracing have been recommended with a higher level of evidence and should be incorporated in the rehabilitation process. The range of motion, stretching, strengthening, neuromuscular, proprioceptive, and sport-specific activities should all be included in an exercise program. A sports physician should decide whether an athlete should return to the sport based on self-reported factors, manual stability tests, and functional performance testing. All doctors should be aware of the prevalent misconceptions and errors in the therapy of ankle sprains and take precautions to prevent them. Excessive imaging, unjustified weightlessness, inappropriate immobility, a delay in functional motions, and insufficient rehabilitation are a few of them. Application of an algorithmic strategy based on facts and considering individual characteristics is beneficial and need to be advised.

Royen, Arn & Shahabpour, Maryam (2020) This chapter discusses sports-related injuries to the ankle and foot's ligaments and tendons with a focus on the trauma processes, ideal imaging modalities, and relevant imaging results. An ankle sprain is the most prevalent injury to the ankle, which is one of the most common injury locations in sports. Ligamentous elongations or rips often result from acute trauma, while tendinosis more frequently results from overuse and repeated stress. Acute tendon rips often happen in a tendon that is already ill. Due to the intricate anatomy and many possible damage sites, clinical diagnosis may be difficult. Most structures in the foot and ankle are positioned superficially, making ultrasound ideal for this examination. Additionally, it enables dynamic evaluation of ligaments and tendons in comparison to static CT or MRI. Due of the strong soft-tissue contrast, MRI is another excellent modality. In determining related intra-articular lesions and bone marrow oedema, it is crucial. For the identification of soft tissue calcifications and bone avulsions, radiography and CT are useful complements to MRI. Early MRI of the injured ankle in the athlete may aid in determining the degree of ligament injuries, including those to the Chopart and Lisfranc ligaments in the midfoot, as well as the lateral ligament complex, syndesmotic complex, deltoid complex, spring or subtalar ligaments. The earliest ligamentous damage to the MTP joint may also be seen on an MRI. Based on the clinical signs and the tendon placement (peroneal, flexor, extensor, plantar, and posterior), tendon diseases may be analyzed on US and MR imaging.

Papadopoulos, Emmanouil & Mani, Raj (2020) For both human and animal diagnosis and treatment, ultrasound is a useful physical modality. It is non-intrusive, non-traumatic, and repeatable. Ultrasound has been used as a therapeutic therapy for around 60 years. Musculoskeletal diseases, such as acute soft tissue injuries, overuse syndromes, chronic orthopedic, and rheumatologic illnesses, are treated using therapeutic ultrasound (TUS). The objective of this study was to examine the therapeutic efficacy of TUS in musculoskeletal acute and chronic pain, primarily through reducing inflammation and accelerating the recovery from soft tissue injuries. TUS is clinically helpful in various musculoskeletal soft tissue pain disorders, according to the data given, however no particular recommendations for its use in clinical settings can be made because of several research' contradictory findings. TUS has been used extensively in phonophoresis without experiencing any negative side effects. With properly planned investigations, the evidence basis might be strengthened.

Seok, Hosik & Lee, Sun & Yun, Seong (2019) Due to its radiation-free nature, affordability, and efficiency, ankle ultrasound imaging may be a better alternative. Prior research on anterior tibiofibular ligament and calcaneofibular ligament injuries, however, produced a range of outcomes. Purpose to assess the diagnostic effectiveness of ankle ultrasonography for lesions to the calcaneofibular ligament and anterior tibiofibular ligament. We looked for research using ultrasonography to diagnose anterior tibiofibular ligament and calcaneofibular ligament injuries in PubMed and EMBASE databases. Diagnostic performance was assessed using bivariate and hierarchical summary receiver operating characteristic modeling. Studies that focused on the severity of the injury (full and partial anterior tibiofibular ligament tears) were included in the subgroup analysis. To explore heterogeneity, we conducted meta-regression analyses. There were

ten papers overall, including 380 patients. The summary sensitivity, summary specificity, and area under the hierarchical summary receiver operating characteristic curve (AUC) for anterior tibiofibular ligament damage were 0.99, 0.92, and 0.99, respectively. The summary sensitivity, summary specificity, and AUC for calcaneofibular ligament damage were 0.95, 0.99, and 0.95, respectively. The summary sensitivity, summary specificity, and AUC in the subgroup analysis for a complete anterior tibiofibular ligament rupture were 0.96, 0.82, and 0.96, respectively. The summary sensitivity, summary specificity, and AUC for a partial anterior tibiofibular ligament rupture were 0.90, 0.82, and 0.93, respectively. The percentage of anterior tibiofibular ligament tears, the ultrasound interpreter, and the reference standard were among the many possible factors that were linked to specificity heterogeneity. Injuries to the anterior tibiofibular ligament and calcaneofibular ligament may be accurately diagnosed by ankle ultrasonography. As a first-line diagnostic technique to identify anterior tibiofibular ligament and calcaneofibular ligament injuries, we advise musculoskeletal radiologists to use ultrasonography.

Spicer, Paul & Fain, Aaron (2019) This article focuses on common sports-related injuries that are amenable to diagnosis by diagnostic ultrasonography. These injuries include rotator cuff-tears, lateral epicondylitis, distal biceps tendon tears, and anterior talofibular ligament injuries. The anatomy, scanning techniques, mechanism of injury, and sonographic appearance of each injury are discussed.

EFFECTS OF ULTRASOUND THERAPY WITH TAPING PNF TRAINING AND PNF TRAINING WITH TAPING IN TREATMENT AND REHABILITATION OF SPORTS INJURIES OF HIGH ANKLE SPRAIN

The medical community is progressively assuming a more prominent role in promoting the improvement of physical fitness. This is achieved via the use of both negative incentives, such as highlighting the risks associated with high cholesterol, low-density lipoprotein (LDL), osteoporosis, or cardiovascular disease, as well as positive incentives, such as the potential for increased competitive performance or reduced body fat. There is evidence to suggest that a segment of the medical community is actively promoting the fitness trend. Simultaneously, the provision of such assistance may be implemented with more discernment if there was the capability to more accurately anticipate the damage ramifications associated with engagement. It is advantageous to endeavor to ascertain the risk variables and provide potential strategies to address these problems. Sprains to the ankle account for about 14% of all sport injuries, resulting in an average occurrence of one ankle injury every season for every 17 players. In the context of high-risk sporting activities, such as leaping and running, the proportion of lost time injuries is notably elevated, accounting for around 25% of all such incidents. Research findings indicate that there is a much higher incidence of ankle sprains in the dominant limb, with a 24-fold increase compared to the non-dominant leg. Furthermore, ankle sprains exhibit a notable recurrence rate, with around 73.5% of individuals experiencing repeated instances of this injury. Ligamentous injuries occurring in the vicinity of the ankle joint are often seen in athletic contexts, particularly in sports involving leaping activities such as basketball and volleyball. The management of these entities is not consistently effective. Frequently, the diagnosis of related injuries is not made, and the rehabilitation of ligamentous injuries is typically insufficient, resulting in a notable recurrence rate.

There are two distinct categories of therapeutic ultrasound effects, namely thermal and nonthermal effects. The thermal changes seen are a result of the absorption of sound waves. Nonthermal effects may arise as a result of several phenomena, including cavitation, microstreaming, and acoustic streaming. Cavitational effects arise because of tissue vibration, leading to the generation of minuscule bubbles that facilitate the transmission of vibrations, so directly stimulating cell membranes. The use of physical stimulation has been seen to augment the cellular repair mechanisms associated with the inflammatory response. The efficacy of therapeutic ultrasound in addressing pain, musculoskeletal injuries, and soft

tissue lesions is still a matter of uncertainty. Research has shown that the use of ultrasound has been found to enhance cellular metabolic activity. Therefore, the use of ultrasonic therapy has been shown to be beneficial in facilitating the process of tissue regeneration, particularly in cases of soft tissue injuries.

The existing body of data pertaining to proprioceptive neuromuscular facilitation (PNF) training has established this approach as the most effective strategy for enhancing flexibility, particularly in terms of short-term improvements in range of motion. In general, an active proprioceptive neuromuscular facilitation (PNF) stretch entails engaging in a contraction of the opposing muscle in order to induce a shortening effect, so placing the target muscle in a stretched position. Subsequently, an isometric contraction of the specific muscle ensues. Proprioceptive Neuromuscular Facilitation (PNF) is a supplementary technique that may be included into a daily stretching routine. Its primary purpose is to facilitate rapid improvements in the range of motion, hence aiding athletes in enhancing their overall performance. In addition to its safety and time efficiency, the notable improvements in range of motion seen within a short timeframe may also enhance adherence to the training and rehabilitation regimen. Proprioceptive Neuromuscular Facilitation (PNF) stretching was first devised as a rehabilitative technique and has shown notable efficacy in this regard. Moreover, this exercise regimen is very effective in selectively engaging and developing certain muscle groups, while concurrently enhancing flexibility and physical strength. The mitigation of pain is of utmost significance, while the enhancement of any deficits in range of motion, muscular strength, and/or proprioceptive abilities has equal importance.

Tape is often used as a therapeutic intervention for the management of symptoms associated with chronic injuries, including medial tibial stress syndrome (commonly known as shin splints), patellaofemoral syndrome, and turf-toe. Athletic tape has the potential to mitigate pain sensations when applied. The application of tape along the nerve tract of irritated or inflamed tissue has the potential to decrease the extent of inflammation and alleviate pain. Ankle tape has the potential to enhance ankle stability via two primary mechanisms: mobility restriction and proprioceptive feedback. In terms of cost, ankle taping proves to be a more economical option compared to both ankle braces and sports shoes for a single therapy. At its inception, the efficacy of ankle taping has resemblance to bracing. Nevertheless, empirical research has shown a notable decline in efficacy over a duration of 24 minutes of engagement. In addition, the efficacy of ankle taping diminishes significantly after durations as little as 40 minutes.

Therefore, several physiotherapy techniques are used in the treatment of ankle ligament injuries sustained by athletes. There are several therapeutic modalities used in clinical practice, including ultrasonic treatment (UT), cryotherapy, massage, proprioceptive neuromuscular facilitation (PNF) training, taping, and electrotherapy techniques such as short-wave diathermy and transcutaneous electrical stimulation (TENS). In order to speed up recuperation after an accident, it is important to carefully choose an appropriate course of therapy. The objective of this study is to investigate the impact of ultrasound therapy (UT), UT combined with taping, proprioceptive neuromuscular facilitation (PNF) training, and PNF training with taping on the management and recovery of ankle ligament injuries. Despite the existence of other types of ankle injuries, the researcher specifically chose to focus on high ankle sprains for the purpose of this study. In order to assess the impact of various therapies on the wounded players, the researcher opted to measure edema as the dependent variable.

CARE FOR ATHLETES WITH ACUTE LATERAL ANKLE LIGAMENT INJURIES

One ankle inversion injury happens daily for every 10,000 persons, according to estimates. 7–10% of all admissions to hospital emergency rooms are for ankle sprains. A quarter of all musculoskeletal system injuries include inversion injuries, and half of these injuries are caused by sports. In 24 of the 70 sports covered in Fong et al.'s systematic study, the ankle was the part of the body that sustained the most injuries. A frequent age range for ankle

sprains in those under 35 is between 15 and 19 years old. The majority of the time, athletes who compete in basketball, soccer, jogging, or ballet or dance get these injuries, which may make up up to 40% of all sports-related injuries. Ankle injuries are to blame for up to 53% of injuries in basketball, 29% of injuries in soccer, and 12% of time missed in football. Injuries among volleyball players occurred at a rate of 0.9 per 1,000 player hours, with 0.7% occurring in practice and 2.6% in competition. There is mixed information as to whether females are more likely than males to have lateral ligamentous complex injuries, which account for three-quarters of ankle injuries. Without the proper diagnosis and care, ankle injuries may result in osteoarthritis, chronic instability, and other long-term consequences. Injured key players may cause high-level commercial sports teams to lose and suffer financial loss. Athletes place a disproportionately higher load and strain on their ankle joints than the general population, and participation in high-level sports may be a risk factor for the emergence of lingering symptoms. As a result, treating acute ankle ligament injuries in athletes presents a unique set of difficulties. Prior until now, several recommendations for the general population's diagnosis, treatment, and prevention of acute lateral ankle ligament damage were developed. This article discusses acute lateral ankle injuries with a focus on professional athletes and explains why these injuries should be treated. A person who practices and competes in a sport professionally is one who does so for a livelihood.

Anatomy

Although the tibiotalar joint is thought of as a straightforward hinge joint, its articular, ligamentous, and tendinous anatomy make it far more complicated. The anterior talofibular ligament (ATFL), calcaneofibular ligament (CFL), and posterior talofibular ligament (PTFL) are the three ligaments that make up the lateral ankle ligament complex. The ATFL travels from the antero-inferior border of the fibula to the lateral margin of the talus, inserts close to the intersection of the talar body and neck, and merges with the ankle capsule. In order to attach to the lateral tubercle of the calcaneus, the CFL travels from its origin on the inferior border of the fibula distal to the ATFL, beneath the peroneal tendons. From the posterior fibula to the lateral tubercle of the posterior process of the talus, the capsule thickens to form the PTFL.

Classification

Most writers use the term "ankle sprain" to designate a morphologic disorder that encompasses a variety of pathologies, from ligament overstretching to full rupture with joint instability. For lateral ankle ligament injuries, there are many grading and staging systems based on the anatomical damage, clinical symptoms, trauma mechanism, stability, and "severity" of the injury. Only when a categorization affects prognosis or therapy is it considered to be meaningful. We suggest using the 1982 method established by Hamilton and Kaikkonen. This method combines the patient's symptoms with anatomical damage. This approach rates the injuries from I to III according on how severe the ankle sprains are. Only the distinction between a simple sprain (grade I) and genuine instability (grade II or III) is significant in clinical practice since only grades II and III call for extra care. Only when a delayed physical examination is used, as will be covered later on, is this categorization method trustworthy.

Mechanism of injury

Understanding the mechanism of injury is crucial for achieving research objectives, as well as for improving treatment and injury prevention. Inversion of the foot and ankle is often the consequence of a twisting injury or "going over on the ankle." Supination and adduction (inversion) of the plantar-flexed foot are the most typical trauma mechanisms. Additionally, the lower leg might sometimes externally rotate with regard to the ankle joint. Due to the tightness of the ligament in this posture, inversion injuries to the plantar-flexed foot result in ATFL damage. Except for goalkeepers, who had 79% of their ankle sprains in non-contact scenarios, player contact accounted for the majority (59%) of ankle sprains received during soccer. Video analysis of the ankle supination sprain injury by Andersen et al. revealed two main mechanisms: (2) forced plantar flexion when the injured player strikes the

opponent's foot while attempting to shoot or clear the ball. (1) opponent impact on the medial aspect of the leg just before or at foot strike, resulting in a laterally directed force that causes the player to land with the ankle in a vulnerable inverted position.

History

If an ankle inversion injury is not appropriately identified and treated, 30–40% of patients may have delayed symptoms. The grade and specific diagnosis of a lateral ligament injury cannot be determined without knowledge on the history of the injury mechanism. When an injury occurs, a cracking noise does not indicate whether a rupture has occurred or not. While individuals without a rupture experience swelling later, those with a rupture report more acute edema. Patients who have a rupture are more often forced to cease their activities, while patients who do not experience a rupture report being able to resume their activities more often. The Ottawa ankle standards take into account the capacity to support weight.

Examination

The first evaluation is useful as a triage mechanism to offer immediate first care to protect the athlete from further harm or to counsel the athlete to stop playing in the game or competition. However, the initial evaluation is not accurate enough to determine the grade of injury. The delayed physical examination continues to be the gold standard in the diagnosis of acute lateral ligament damage. Swelling, haematoma, localized discomfort on palpation, and a positive anterior drawer test are the physical examination's key findings. The location of the pain when palpated is crucial. There is no acute lateral ankle ligament rupture if the anterior talofibular ligament does not hurt to the touch. Physical examination performed 4-5 days after trauma offers a high-quality diagnostic method and is more trustworthy than physical examination performed 48 hours after trauma. The anterior drawer test is inaccurate because the examiner is unable to distinguish between haematoma and oedema due to the widespread distribution of the pain and swelling. There is a 90% possibility that there is an acute lateral ligament rupture if there is localized pain on probing with haematoma coloring. The sensitivity and specificity of a positive anterior drawer test alone are 73% and 97%, respectively. An ATFL injury has a sensitivity of 98% and a specificity of 84% when the anterior drawer test is positive and there is pain palpable at the ATFL with haematoma discolouration.

CONCLUSION

Physical examinations performed 4-5 days after a trauma provide a high-quality diagnostic method. In order to diagnose connected injuries (bone, chondral, or tendon), elite athletes often undergo ultrasound and MRI scans. An aggressive, non-operative approach may be used to treat acute lateral ankle ligament injuries of grades II and III. For the first 4-5 days, RICE (Rest, Ice, Compression, and Elevation) treatment is helpful in reducing pain and swelling. We favor a brief (5–10 days) period of immobilization in a detachable boot or below-the-knee cast, followed by a planned functional rehabilitation program, sometimes reinforced with a time spent taping or wearing a lace-up brace. In professional athletes with grade II or III lateral ankle ligament injuries, acute restoration of the ligaments produces superior outcomes with a comparable (perhaps faster) time to recovery and lowers the risks of long-term instability.

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