Background: Athlete is a 20-year-old male collegiate soccer athlete. Athlete has a previous medical history of multiple left ankle lateral sprains and an ACL reconstruction surgery. He still has ongoing injury symptoms during physical activity. The athlete had surgery due to a lateral ankle sprain when he came into contact with another athlete during a slide tackle. His ankle showed swelling and tenderness during palpation. There were abnormal findings to the anterior talo-fibular ligament (ATFL), calcaneo-fibular ligament (CFL), and the peroneal tendons. MRT was 4/5 during exercise and plantar flexion; 5/5 during dorsiflexion and 5/5 for inversion but 4/5 for eversion. Patient was + for anterior drawer, + for inversion, wasn’t able to do pick up test, - bump test, - compression test, - Thompson test. He presented with a lateral ankle sprain but never healed and had sensation of instability. The attending physician noted that the peroneal tendons was snapping out of the groove active inversion and the peroneal tendon could be easily pushed out of the groove. The lateral ankle sprain, peroneal tendon, fracture of the distal fibula, ankle contusion. Treatment: The athlete had surgery and was treated with a brostrom type I repair for a lateral ankle sprain. The peroneal retinaculum was not improving and was complaining of a painful snapping sensation in an ankle with a sensation of instability. The attending physician was referred to see an orthopedic. Radiographs and an MRI were performed. The MRI confirmed the superior peroneal retinaculum was torn. The athlete was still not able to play in the game based on the torn superior peroneal retinaculum. Peroneal retinaculum repair with groove deepening surgery was performed to fix the issue. The athlete was requested to present for three weeks after surgery and to continue to a boot with partial weight bearing to 6 weeks then to full weight bearing by six weeks. The athlete then progresses to focusing on range of motion (ROM), strengthening exercises, proprioceptive exercises, and function exercises and drills to return back to play. The rehabilitation process is six months before the athlete can return back to full activity. The rehabilitation plan for this athlete is that the athlete will perform exercises and drills for return back to play. The rehabilitation plan for this athlete is that the athlete will perform exercises and drills to return back to play. The rehabilitation plan is six months before the athlete can return back to full activity.

Abstract

Case Report

Tearing of the superior peroneal retinaculum is an uncommon injury but when it does occur it can often lead to chronic symptoms and decreased performance. The relationship to forceful contraction of the peroneal musculature while the foot is dorsiflexed, inversion, plantar flexed, and eversion can cause a peroneal tendon dislocation. This injury is rare in the athletic training room. There are not many large studies on the different surgical approaches on the peroneal retinaculum. There is no evidence that surgical technique is the most superior with the best results compared to other surgical approach methods. Caucasian soccer athlete was treated with a superior peroneal retinaculum tear. There are four types of superior peroneal retinaculum tears. Type 1 is a proximal fibular groove tear, type 2 is when the peroneal retinaculum is stripped from the fibula, type 3 is a distal fibular groove tear, and type 4 is when the peroneal retinaculum is torn from the distal fibula. There is no reference standard surgical procedure developed for a torn superior peroneal retinaculum. The athlete was diagnosed with a torn superior peroneal retinaculum. The athlete had peroneal retinaculum repair with groove deepening surgery. This procedure is the repair for a peroneal retinaculum tear with groove deepening is a 4-6 week period before being allowed to return back to play. The protocol used for this soccer athlete was the Brostrom repair for chronic ankle sprain for return back to play. The rehabilitation process is six months before the athlete can return back to full activity. The rehabilitation plan for this soccer athlete was the Brostrom repair for chronic ankle sprain for return back to play. The rehabilitation plan is six months before the athlete can return back to full activity.

Introduction

Purpose

The purpose of this case report was to introduce a 20-year-old collegiate soccer athlete who received a torn superior peroneal retinaculum tear that was causing snapping peroneal tendons to the peroneal retinaculum repair with groove deepening surgery and begin return to play. An overview of this unique injury is present to obtain additional information related to return to play and rehabilitation of the peroneal retinaculum. The case report was from the commencement of the superior retinaculum, from onset to return of play as a collegiate soccer player.

Anatomy

The lateral compartment of the lower leg contains the peroneous longus and peroneus brevis muscles and tendons as well as the lateral malleolus of the fibula. The talus and the head and upper two-thirds of the lateral surface of the fibula. It inserts into the base of the 1st metatarsal and the lateral cuneiform bone. The first metatarsal is palpated at the junction of the foot at the ankle with secondary function being the stabilizer of the lateral ankle joint (Kumar, 2017). The tendons of the peroneus longus and brevis enter into the retro-malleolar groove deep to the superior peroneal retinaculum. Inferior and anterior to the superior peroneal retinaculum and lateral malleolus, the inferior peroneal retinaculum covers the distal end of the peroneal tendons. A low-lying muscle belly has been identified as a potential cause for inflammation of the peroneal tendons as the level of the superior peroneal retinaculum because of the increased volume within the retro-malleolar canal of the retro-malleolar groove, increasing the risk of peroneal tendon subluxation and chronic pain (Kane, 2017).

Rehabilitation and Results

Snapping peroneal tendons due to a superior peroneal retinaculum tear are very rare and frequently misdiagnosed. These injuries can occur in all athletes that participate in high velocity activities that require a long recovery period. The collegiate male soccer athlete tore his superior peroneal retinaculum during a soccer game due to another athlete slide tackling into the side of his left ankle. This athlete was originally diagnosed with a lateral ankle sprain but upon further inspection in the physician the athlete was not im- proving, he was diagnosed with a torn superior peroneal retinaculum. The athlete had peroneal retinaculum repair with groove deepening surgery. The rehabilitation process involves six months of intensive physical therapy. The athlete also had to go through a return to play protocol. There are many factors to surgery that will affect the timeline for return to play. For this athlete, this allowed the superior peroneal retinaculum with groove deepening surgery to be diagnosed and treated to return back to play. The rehabilitation plan was a high success rate with a low fail rate. Many athletes have reported that they have no residual pain or issues since surgery.


Discussions and Summary

The rehab protocol for a peroneal retinaculum repair with groove deepening is a 4-6 week period before being allowed to return back to play. The rehabilitation process is six months before the athlete can return back to full activity. The rehabilitation plan for this soccer athlete was the Brostrom repair for chronic ankle sprain for return back to play. The rehabilitation plan is six months before the athlete can return back to full activity. The rehabilitation plan for this soccer athlete was the Brostrom repair for chronic ankle sprain for return back to play. The rehabilitation plan is six months before the athlete can return back to full activity. The rehabilitation plan for this soccer athlete was the Brostrom repair for chronic ankle sprain for return back to play. The rehabilitation plan is six months before the athlete can return back to full activity. The rehabilitation plan for this soccer athlete was the Brostrom repair for chronic ankle sprain for return back to play. The rehabilitation plan is six months before the athlete can return back to full activity.

Rehabilitation

Methods: Patients were divided into two groups: G1 Group retinaculum repair with groove deepening surgery and G2 Group retinaculum repair with groove deepening surgery. The study is a randomized clinical trial. The patients were divided into two groups: G1 Group retinaculum repair with groove deepening surgery and G2 Group retinaculum repair with groove deepening surgery. The patients in G1 group were treated with Groove deepening surgery while the patients in G2 group were treated with conservative treatment. The rehabilitation protocol was the Brostrom protocol for chronic ankle sprain for return back to play. The rehabilitation plan for this soccer athlete was the Brostrom repair for chronic ankle sprain for return back to play. The rehabilitation plan is six months before the athlete can return back to full activity. The rehabilitation plan for this soccer athlete was the Brostrom repair for chronic ankle sprain for return back to play. The rehabilitation plan is six months before the athlete can return back to full activity. The rehabilitation plan for this soccer athlete was the Brostrom repair for chronic ankle sprain for return back to play. The rehabilitation plan is six months before the athlete can return back to full activity. The rehabilitation plan for this soccer athlete was the Brostrom repair for chronic ankle sprain for return back to play. The rehabilitation plan is six months before the athlete can return back to full activity.