**Rehabbing Lateral Ankle Sprains**

Lateral ankle sprains are a common injury seen in an outpatient orthopedic setting, especially among athletes. Research estimates that approximately 20% – 40% of all athletic injuries involved ankle sprains.1 Ankle mobilizations are commonly used as part of the treatment plan for this population. Multiple studies have found anteroposterior talocrural mobilizations to be effective in improving ROM, pain levels, and ankle function.2 Preliminary research has also been conducted investigating the effectiveness of fibular mobilizations to treat lateral ankle sprains, which have also been found to have positive results. During the acute phase of rehabilitation following lateral ankle sprain, we want to be sure we are using the most effective techniques to treat our athletes to help them improve functional ability quickly while also providing lasting results. But is there a difference in effectiveness between talocrural mobilizations and fibular mobilizations?

Izaola-Azkona et al. conducted a double-blind randomized control trial to investigate the short-term and long-term effects of anteroposterior mobilization of the talus compared to distal fibular mobilization with movement and distal fibular mobilization with movement with tape.2 Participants were amateur soccer players with acute ankle sprains (<72 hours post-injury) allocated to one of the three treatment groups.2 All participants received eight treatment sessions, with mobilizations performed three times per week for the first two weeks.2 The first six sessions consisted of the mobilizations in addition to education, manual therapy, and electrophysical modalities to ensure that patients were receiving comprehensive treatment plans.2 The last two sessions were used to educate patients on proprioceptive exercises. Outcomes examined included Foot and Ankle Ability Measure (FAAM), Patient Global Impression of Improvement Scale (PGI-I), visual analogue scale (VAS), pressure pain threshold (PPT), volume, strength, and ankle ROM.2 Outcomes were assessed at baseline and at two, five, twelve, and fifty-two weeks post intervention.

The results showed that at two weeks, the talocrural mobilization group demonstrated greater FAAM sport subscale scores compared to the fibular mobilization groups.2 When looking at medium and long-term effects, both of the fibular mobilization with movement groups were found to result in greater ADL function at five weeks and greater sports function at twelve and fifty-two weeks compared to the talocrural mobilization group.2 No significant differences were noted between the fibular mobilization with movement group and the fibular mobilization with movement group with tape.2 When looking at all time points, there were also no significant differences found between groups for PGI-I, pain, PPT, ROM, strength, or volume.2

Based on these findings, fibular mobilization with movement should be strongly considered as a part of treatment for lateral ankle sprains in athletes. These mobilizations resulted in greater long-term effects, which can help our athletes have lasting benefits even after discharge from physical therapy. Although the talocrural mobilizations did not have as significant long-term effects, they resulted in greater short-term athletic function. When preparing an athlete for return to sport following an acute lateral ankle sprain, it may be beneficial to consider both talocrural and fibular mobilizations as part of our treatment plans to improve functional ability.

1. Cavazos GJ, Harkless LB. The epidemiology, evaluation, and assessment of lateral ankle sprains in athletes. *Journal of Sports Medicine and Therapy*. 2021;6:008–017.

2. Izaola-Azkona L, Vicenzino B, Olabarrieta-Eguia I, Saez M, Lascurain-Aguirrebeña I. Effectiveness of mobilization of the talus and distal fibula in the management of acute lateral ankle sprain. *Physical Therapy*. 2021;101:1–10.