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BACKGROUND

Soccer is classified as a high to moderate intensity contact/collision sport, with most injuries overall occurring from either player-to-player or player-to-ground/ball/goalpost contact rather than overuse. Contact injuries occur primarily when the player is tackling the ball, being tackled, or heading the ball as 1 or more defenders are impeding the play. The mechanisms of noncontact injury include running, twisting/turning, shooting, and landing. Injuries to the lower extremities are most common, with the majority of injuries resulting from nobody contact. Ankle injuries account for 16% to 29% of these injuries and are more frequent in male players (1).

Injury avoidance is crucial for elite soccer athletes of all competitive levels. It allows them to train and develop their skill sets at their maximal effort without unnecessary layoffs. Time loss due to injury is critical for both a promising soccer athlete and their team due to injury limiting the possibility of the team reaching its highest performance potential. Consequently, it is evident that injury prevention plays a necessary role in reducing the costs incurred from soccer related injuries as well as minimizing a player's time loss due to injury. Prevention is the first step in maintaining optimal health, and as such to prevent injury we must understand what types of injuries are commonplace for soccer athletes and how they occurred (3).

Strength and proprioceptive training have shown good results in reducing the risk of sprain. Some studies report that proprioceptive training results in a relative risk reduction of 20% to 60% of injury, especially in athletes who have suffered a sprain previously. As such, an effective spraying prevention train plan reduces the overall incidence of sprains in sports (2).

PURPOSE

This study we intend to verify the benefits of the prevention training implementation for ankle sprains in juvenile football players.

METHODS

Initially, the players and their parents were asked to consent to participate in the study, asking them to sign the informed consent form.

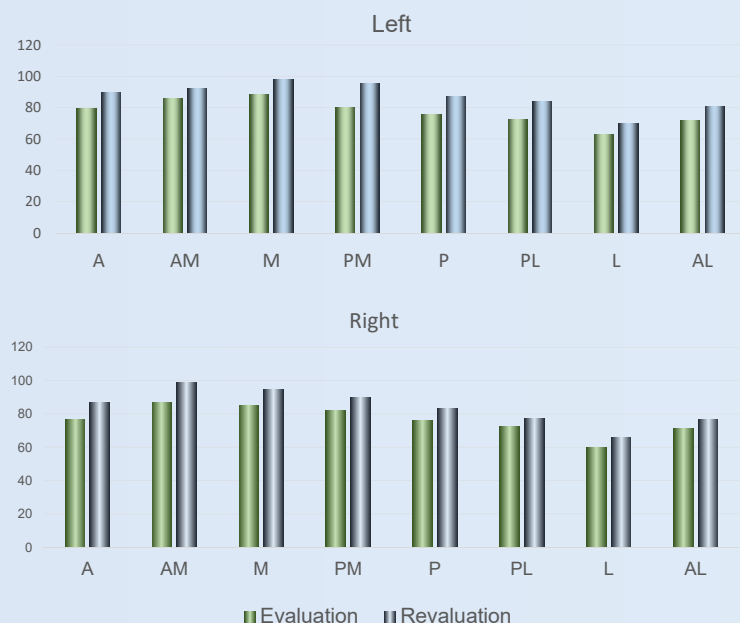
Later, the athletes were asked to answer a questionnaire that would allow us to characterize the sample and another to monitor the instability of the ankle joint, the Cumberland Ankle Instability Tool (CAIT). The Star Excursion Balance Test (SEBT) was used to assess the stability of the ankle.

After this collection, a prevention plan was proposed, based on the evidence in order to improve the stability of the players ankle. After collecting the data, it was implemented a prevention plan, composed by 3 stages: warming exercises, strength exercises and proprioception training. This prevention plan was implemented for six weeks, three times a week, for 15-20 minutes a session.

Six weeks later, the ankle stability was again evaluated through the SEBT, in order to determine if there was an improvement in the athletes ankle stability under this study. This can prove the veracity of the prevention plan.

RESULTS

Star Excursion Balance Test – Medium values



Through these graphs we can see an improvement in the mean values in the re-evaluation compared to the evaluation. This suggests that there was an increase in ankle stability after the implementation of the training. This increased stability will lead to a lower probability of ankle sprain.



Fig 1 – Realization of SEBT

CONCLUSIONS

Based on the obtained results, it can be concluded that the proprioceptive training relative to the ankle was effective even in a small sample, because differences were found between the means before and after the training implementation, showing the increment of the stability acquired by this joint.

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