

before practice ($p = 0.85$; effect size = 0.10) and participation in other sports ($p = 0.10$; effect size = 0.15) are not associated with the occurrence of injuries in recreational BT practitioners.

Conclusion: The incidence of injuries in BT practitioners is relatively low and is not associated with training volume.

Implications: The results may contribute to the understanding of injuries in BT practitioners and indicate variables that do not need to be the focus of attention in injury prevention protocols in this population.

Keywords: Athletic injuries, epidemiology, injury prevention

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MOBILITY, DYNAMIC POSTURAL BALANCE AND NEUROMUSCULAR CONTROL OF SOCCER PLAYERS WITH AND WITHOUT A HISTORY OF LATERAL ANKLE SPRAIN

Victor Franklyn, Renato de Souza Melo, Caroline de Cássia Batista de Souza, Eleide Rosane Borba Lira, Ernandes José de Souza Neto, Vinícius José Guimarães do Carmo, Maria das Graças Rodrigues de Araujo, Ana Paula de Lima Ferreira
Departamento de Fisioterapia, Universidade Federal de Pernambuco (UFPE), Recife, PE, Brazil

Background: Lateral ankle sprain (LAS) is one of the most common injuries in soccer and is associated with persistent functional deficits, affecting mobility, dynamic balance, and neuromuscular control. Despite its high prevalence, there is still a gap in understanding the long-term implications of LAS on the physical performance of young athletes. Assessing these parameters is crucial to optimizing rehabilitation strategies and injury prevention.

Objectives: To compare mobility, neuromuscular control, and dynamic balance in under-20 soccer players with and without a history of LAS.

Methods: This is an observational, descriptive, analytical, and cross-sectional study conducted with 75 under-20 athletes (46 with a history of LAS and 29 without). Data collection included anthropometric and functional assessments using the Cumberland Ankle Instability Tool (CAIT) and the Foot and Ankle Ability Measure (FAAM) questionnaires, as well as functional tests such as the Weight-Bearing Lunge Test (WBLT), Hop Test, and Y Balance Test (YBT).

Results: Athletes with a history of LAS showed significantly lower neuromuscular control and dynamic balance. The LAS group performed worse in the Triple Hop Test for the right lower limb (mean difference = -25.42 cm; 95% CI: -45.63 to -5.21; $p = 0.018$; Cohen's $d = 0.67$). In the Y Balance Test, the anterior reach of the right lower limb was lower in the LAS group (mean difference = -2.91 cm; 95% CI: -5.78 to -0.04; $p = 0.046$; Cohen's $d = 0.54$). Additionally, ankle mobility, assessed by the WBLT, was lower in the LAS group (mean difference = -2.37°; 95% CI: -4.53 to -0.21; $p = 0.031$; Cohen's $d = 0.49$). The Cumberland Ankle Instability Tool questionnaire indicated lower stability in the LAS group for the right lower limb (mean difference = -2.38 points; 95% CI: -3.95 to -0.81; $p = 0.003$; Cohen's $d = 0.74$) and for the left lower limb (mean difference = -1.78 points; 95% CI: -3.01 to -0.55; $p = 0.005$; Cohen's $d = 0.61$). The Foot and Ankle Ability Measure questionnaire indicated poorer functionality in daily and sports activities ($p < 0.05$).

Conclusion: The findings highlight persistent functional deficits in mobility, dynamic balance, and neuromuscular control among athletes with a history of LAS. These deficits may contribute to a higher risk of re-injury and impaired sports performance. Identifying these deficiencies allows for targeted interventions in rehabilitation, injury prevention, and performance optimization.

Implications: This study reinforces the importance of implementing preventive and rehabilitative strategies for young soccer players with a history of LAS. Addressing deficits in mobility, balance, and neuromuscular control may improve performance and reduce recurrence rates. Integrating these assessments into sports routines can enhance clinical decision-making in physiotherapy, supporting long-term athletic development and injury prevention programs.

Keywords: Ankle Injuries, Postural Balance, Motor Activity

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WOMEN WITH PATELLOFEMORAL PAIN SHOW FUNCTIONAL DEFICITS WHEN COMPARED TO ASYMPTOMATIC WOMEN

Thiago André Pereira Gonçalves, Isabela Vitoria Souza Araujo, Vera Lúcia Freitas Carvalho, Deborah Hebling Spinoso
Universidade Estadual Paulista (UNESP), Marília, SP, Brazil

Background: Patellofemoral pain (PFP) is characterized by pain in the anterior region or around the patella during weight-bearing activities, being more prevalent in women. Its high recurrence rate can compromise the performance of daily activities. Functional tests are simple and low-cost tools widely used to assess functional performance in patients with musculoskeletal disorders. However, the functional deficit identified through these tests is still underexplored in the PFP population. Therefore, investigating whether functional tests can detect performance differences compared to asymptomatic individuals may be relevant to improve assessments in clinical practice.

Objectives: Compare the performance in functional tests between women with and without PFP.

Methods: Sixty women, aged between 18 and 35 years, physically active, participated in this study, divided into two groups: PFP ($n = 30$) and control ($n = 30$). Initially, anamnesis was performed to obtain personal data and eligibility criteria. Functional assessment was conducted through three tests. The forward jump test, in which the participant had to stand on one leg, jump as far as possible, and land without losing balance. The test was performed three times, and the best performance was considered for data analysis. The one-legged chair rise test, in which the participant had to rise from a chair and then sit back down using only the assessed leg, performing as many repetitions as possible in 30 seconds. The step-down test, in which the participant was asked to touch the ground with the heel of the non-tested leg while keeping the tested leg on the step, then return to the initial position, performing as many repetitions as possible in 30 seconds. For data analysis, an independent samples t-test was applied, with a significance level of $p < 0.05$.

Results: Women with PFP showed a deficit in functional performance in the forward jump test ($p = 0.005$), step-down test ($p < 0.001$), and one-legged chair rise test ($p = 0.042$) compared to asymptomatic women.