DOI: 10.7860/JCDR/2025/80478.21602

Effects of Balance Training on Chronic Ankle Instability in Athletes: A Systematic Review

Aditya Bhardwaj, BPT Student, Department of Physiotherapy, Maharishi Markandeshwar Institute of Physiotherapy and Rehabilitation, Maharishi Markandeshwar (Deemed to be University), Mullana, Ambala, Haryana, India.
Aditi Popli, Assistant Professor, Department of Physiotherapy, Maharishi Markandeshwar Institute of Physiotherapy and Rehabilitation, Maharishi Markandeshwar (Deemed to be University), Mullana, Ambala, Haryana, India.
Lakshay Panchal, Demonstrator, Department of Physiotherapy, Maharishi Markandeshwar Institute of Physiotherapy and Rehabilitation, Maharishi Markandeshwar (Deemed to be University), Mullana, Ambala, Haryana, India.

NAME, ADDRESS, E-MAIL ID OF THE CORRESPONDING AUTHOR:

Dr. Aditi Popli,

Assistant Professor, Department of Physiotherapy, Maharishi Markandeshwar Institute of Physiotherapy and Rehabilitation, Maharishi Markandeshwar (Deemed to be University), Mullana, Ambala, Haryana, India.

E-mail: aditi.popli@mmumullana.org

ABSTRACT

After an initial ankle sprain or injury it is followed by Chronic Ankle Instability (CAI), which is characterised by recurring feeling of the ankle giving away. While performing this study the effects of balance training on athletes' (CAI), two different training programmes were utilised: the Progressive Hop-to-Stabilisation Balance (PHSB) and the classic Single-limb Balance (SLB). Athletes commonly go through injury such as lateral ankle sprain, which can result in CAI, which is characterised by a continuous sensation of the ankle “giving way.” Due to this injury decline in athletes performance can be observed and neuromuscular control in also effected by this condition. We are aiming to find out how the balance training can effect athletes who have CAI. Databases such as Cochrane Library, and PubMed were utilised for this literature review. Articles between December 2004 -2024 were taken.Interestingly, the SLB group showed larger gains in self-reported sports function than the PHSB group, even though both training regimens were beneficial. This implies that dynamic postural control can be enhanced by both strategies, SLB can provide further benefits for particular functional outcomes. However, further research is warranted to explore long-term effects and potential variations in training intensity and frequency. In conclusion, this study contributes valuable insights into rehabilitation strategies for CAI among athletes. By comparing PHSB and SLB programmes it highlights their effectiveness in enhancing balance, stability, and overall athletic performance and reduce and ankle “giving away”. The implications of this research extend to improving recovery outcomes for athletes dealing with chronic ankle instability.

Keywords: Ankle injuries, Exercise therapy, Postural balance, Proprioception.