DOI: 10.7860/JCDR/2025/80478.21841

Effectiveness of Kinesiotaping in Managing Medial Tibial Stress Syndrome in Athletes: A Literature Review

Sharmishtha, BPT Student, Maharishi Markandeshwar Institute of Physiotherapy and Rehabilitation, Maharishi Markandeshwar (Deemed to be University), Mullana, Ambala, Haryana, India.
Rittu Sharma, Assistant Professor, Maharishi Markandeshwar Institute of Physiotherapy and Rehabilitation, Maharishi Markandeshwar (Deemed to be University), Mullana, Ambala, Haryana, India.
Swarup Ghosh, MPT Student, Maharishi Markandeshwar Institute of Physiotherapy and Rehabilitation, Maharishi Markandeshwar (Deemed to be University), Mullana, Ambala, Haryana, India.
Jahanvi Dave, Assistant Professor, Maharishi Markandeshwar Institute of Physiotherapy and Rehabilitation, Maharishi Markandeshwar (Deemed to be University), Mullana, Ambala, Haryana, India.
Kanika Bhatia, Assistant Professor, Maharishi Markandeshwar Institute of Physiotherapy and Rehabilitation, Maharishi Markandeshwar (Deemed to be University), Mullana, Ambala, Haryana, India.
Kanika, Assistant Professor, 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:

Rittu Sharma,

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

E-mail: ritubhardwaj3105@gmail.com

ABSTRACT

Medial Tibial Stress Syndrome (MTSS) is a common overuse injury affecting athletes, particularly those involved in running and jumping activities. Characterised by pain along the inner edge of the shin bone, they impact the muscles, tendons, and bone tissue in the area. Prevalent among runners and young athletes aged 20 to 30 years, with studies reporting a prevalence rate of 13.6% to 20% in runners, shin splints can significantly hinder performance and overall well-being. This study seeks to review and summarise the current evidence base regarding the effectiveness of kinesiotaping as an adjunct to other interventions, compared to other taping methods, sham taping, or alternative treatments in athletes. A comprehensive search of PubMed, Google Scholar, Scopus and Cochrane Library from 2014 to 2024, using the keywords "kinesiotaping," "shin splints," and "medial tibial stress syndrome" with Boolean operators AND and OR, initially retrieved 492 articles. After removing duplicates, six relevant articles were identified and analysed for further review. Kinesiotaping demonstrated statistically significant improvements ($p<0.05$) on outcome measures such as pain (assessed using Visual Analogue Scale [VAS] and Numerical Pain Rating Scale [NPRS]), navicular heightor drop, plantar pressure distribution (measured using specific foot scan platforms), static balance (using single leg balance tests), dynamic balance (using Y-balance test), postural control, single leg hop tests and sprint tests when compared to sham or placebo taping. However, two studies reported no superior benefits of kinesiotaping over rigid taping. Preliminary evidence suggests that kinesiotaping is effective for managing MTSS. The heterogeneity of outcome measures and the focus on short-term effects limit the ability to draw conclusive evidence on its overall effectiveness. Further, high-quality trials are needed to evaluate the long-term effects of kinesiotaping and compare it with rigid taping or other treatments to provide definitive conclusions.

Keywords: Pain, Postural Balance, Running, Taping.