DOI.10.7860/JCDR/2026/90232.23811 Abstract No.: 41

Effectiveness of Myofascial Release Techniques in Reducing Pain and Improving Function in Iliotibial Band Syndrome: A Systematic Review

PRABAL TANEJA[1], SANJIB KUMAR DAS[2]

ABSTRACT

Introduction: Iliotibial Band Syndrome (ITBS) is a common overuse injury characterised by lateral knee pain, particularly among runners, cyclists, and physically active individuals. Increased iliotibial band tension and soft tissue restrictions are frequently implicated in the pathomechanics of the condition. Myofascial Release (MFR) techniques are commonly used in clinical practice; however, evidence regarding their effectiveness in ITBS remains variable.

Aim: To systematically review the available evidence on the effectiveness of MFR–based techniques in reducing pain and improving functional outcomes in individuals with ITBS or iliotibial band tightness.

Materials and Methods: A systematic literature search was conducted across PubMed, Cochrane Library, PEDro, ScienceDirect, and Google Scholar for studies published between 2005 and 2025. Randomised controlled trials, controlled clinical trials, and quasi-experimental studies evaluating myofascial release interventions were included. Outcomes assessed included pain intensity, functional outcomes, iliotibial band flexibility, pressure pain threshold, and range of motion. Study selection followed PRISMA guidelines. Methodological quality was assessed using the PEDro scale and the Joanna Briggs Institute checklist. A narrative synthesis was performed.

Results: Twelve studies met the inclusion criteria. The findings indicated that myofascial release techniques, including manual myofascial release, self-myofascial release using foam rollers, trigger point release, and instrument-assisted soft tissue mobilisation, were effective in reducing pain and improving flexibility-related outcomes. Combined interventions involving myofascial release and exercise showed better functional outcomes than exercise alone.

Conclusion: MFR techniques appear to be effective adjuncts in the conservative management of ITBS, contributing to pain reduction and improved functional outcomes.

Keywords: Functional outcomes, Instrument-assisted soft tissue mobilisation, Pain and function, Self-myofascial release.

PARTICULARS OF CONTRIBUTORS:
1. Student, Department of Physiotherapy, Amity Institute of Health and Allied Sciences, Amity University, Noida, Uttar Pradesh, India.
2. Associate Professor, Department of Physiotherapy, Amity Institute of Health and Allied Sciences, Amity University, Noida, Uttar Pradesh, India.

NAME, ADDRESS, E-MAIL ID OF THE CORRESPONDING AUTHOR:
Sanjib Kumar Das,
Associate Professor, Department of Physiotherapy, Amity Institute of Health and Allied Sciences, Amity University, Noida-201301, Uttar Pradesh, India.
E-mail: sanjib_bpt@yahoo.co.in