

Effectiveness of Different types of Kinesio Taping Application on Calf Muscle Fatigue in Healthy Collegiate Athletes: An Experimental Study

DEEPAK TYAGI¹, VINAY KUMAR SINGH², AJEET KUMAR SAHARAN³, CS RAM⁴

ABSTRACT

Introduction: Fatigue is a highly common phenomenon among athletes in life and sports. It results in decreased muscle strength, pain, decreased range of motion, balance, and agility and increased risk of injury, which ultimately results in decreased sports performance of the athlete. Many studies have examined the effects of Kinesio Taping (KT) on muscle fatigue. However, the effect of different types of application of KT has been rarely reported.

Aim: This study aimed to fill this research gap by examining the effects of different types of applications of KT on muscle fatigue.

Materials and Methods: A three-arm parallel pretest-post-test experimental design was used. Forty-five collegiate athletes were

randomly assigned to three groups. Group A received Y shaped application of KT, Group B received I shaped application of KT and Group C was the control group without KT. The number of heel rises was measured before and after taping in all the groups, using a habermeter and metronome. The taping was done following the principles of kenso kaze.

Results: Group A (Y-shaped) number of heel rises significantly increased 18.76% ($p < .001$) after applying KT. Group B (I-shaped) results shows non-significant effect on heel rises ($p = .136$).

Conclusion: Y-shaped application of KT over the calf muscle is effective in reducing fatigue.

Keywords: Agility, Balance, Heel-rise test

PARTICULARS OF CONTRIBUTORS:

1. PhD Scholar, NIMS College of Physiotherapy and Occupational Therapy, NIMS University, Jaipur, Rajasthan, India.
2. Associate Professor, Department of Orthopaedics, NIMS University, Jaipur, Rajasthan, India.
3. Professor and Principal, NIMS College of Physiotherapy and Occupational Therapy, NIMS University, Jaipur, Rajasthan, India.
4. Principal, BCIP, Delhi, India.

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

Mr. Deepak Tyagi,
PhD Scholar, NIMS College of Physiotherapy and Occupational Therapy, NIMS University, Jaipur, Rajasthan, India.
Email: deepaktyagi519@gmail.com