

CODE: ABS 037

COMPARISON OF POSTERIOR MYOFASCIAL LINE RELEASE VERSUS POST ISOMETRIC RELAXATION FOR HAMSTRING TIGHTNESS AMONG COLLEGE STUDENTS.

A. Subashini¹, Jeyanthi.S².

¹PG Student, Sri Venkateshwaraa College of Physiotherapy, Pondicherry University, Pondicherry, India, ²Principal & Professor, Sri Venkateshwaraa College of Physiotherapy, Pondicherry University; Associate Dean-Research, Sri Venkateshwaraa Group of Institutions, Pondicherry, India.

Background: Hamstring muscle tightness is a common musculoskeletal problem among college students, often resulting from prolonged sitting, reduced physical activity and academic workload. Manual therapy technique such as posterior myofascial line release and post isometric relaxation technique are commonly used to improve muscle flexibility and reduced tightness.

Purpose: To compare the effect of posterior myofascial line release versus post isometric relaxation for hamstring tightness among college students.

Methods & Materials: A total of 44 students with Hamstring muscle tightness were randomly assigned into 2 groups. Group A Posterior myofascial line release and Group B post isometric relaxation. Hamstring muscle tightness was assessed before and after single intervention using the passive knee extension test. The participants continued with active stretching the follow up was conducted on day 5.

Result: A total of 44 participants were divided into MFR (n = 22) and MET (n = 22). The mean age was 19.20 years and mean BMI was 20.41 kg/m². The myofascial line release and post isometric relaxation procedure were administered to the respective groups. The body composition parameters were assessed using a bioelectrical impedance body composition analyzer. The average body fat, bone density, total body water, and P% values were 17.21%, 2.96, 63.72, and 45.75%, respectively. Both groups showed improvement in pre- and post-test values. One-way ANOVA revealed a statistically significant difference between the groups after intervention (p < 0.05). Result suggest that was significant improvement immediately after the treatment session with improvement was precised during the follow up after 5 days of treatment.

Conclusion: Both Myofascial Release (MFR) and Muscle Energy Technique (MET) showed improvement in the measured outcomes from pre-intervention to post-intervention values. However, the MET group demonstrated comparatively greater improvement than the MFR group. Therefore, the study suggests that MET more effective in improving hamstring flexibility among the participants.

Key words: Hamstring tightness, Posterior myofascial line release, Post isometric relaxation, Passive knee extension test.