**Immediate effect of muscle energy technique in comparison with passive stretching**

**on hamstring flexibility of healthy individuals: A randomized clinical trial**

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**ABSTRACT**

**Objective:** To determine the effective treatment for the Hamstring tightness by Passive Stretching and Muscle Energy Technique.

**Study Design:** A randomized clinical trial.

**Place and Duration:** Riphah College of Rehabilitation Sciences Lahore in 5 months 15th March to 15th August, 2015.

**Methodology:** Subjects of both genders with age between 25- 50 years with Tight hamstrings were included in the study and allocated in two groups after randomization. One group was given stretching and the other group was treated with muscle energy technique. Moist heat was given for 20minutes as standard treatment to both groups. The effects of Muscle Energy Technique and Static Stretching was calculated by taking pre and post-treatment readings of active knee extension (AKE), Straight Leg raise (SLR) and visual analogue scale (VAS).

**Results:** Within the group analysis revealed statistically significant difference (p value < 0.05) for each of the outcome measure in each of the treatment group. VAS showed a mean reduction of 4.40 ± 5.26 and 6.80 ± 6.10 in stretching and MET group respectively. AKE showed a mean difference of 4.80 ± 5.29 in stretching and 7.80 ± 8.90 MET groups. SLR showed a mean difference of 1.12 ± 1.09 in stretching and 1.52 ± 0.91 MET groups. However, across the group comparison showed no significant difference in VAS, AKE and SLR with a mean difference of 2.40, 3.00 and 0.40 respectively with p value greater than 0.05

**Conclusion:** Within the group each technique showed significant improvement but on comparing the two groups there was no significant difference in improving the hamstring muscle flexibility, so static stretching and muscle energy technique both are equally effective.

## Keywords: Flexibility, Hamstrings muscle, Muscle energy technique and Static stretching, Tightness, Range of motion

**How to Cite This:**

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