

7th International Conference & Exhibition on

Physiotherapy & Physical Rehabilitation

March 25-26, 2019 | Rome, Italy

Immediate effect of calf myofascial trigger point release on static and dynamic stability of artistic and rhythmic gymnasts.

Kumar P¹, Chachra A², Zutshi K², Dhingra M³^{1,2,3}Jamia Hamdard University, India

Abstract: The purpose of the study was to evaluate the immediate effect of myofascial trigger point release on static and dynamic balance in artistic and rhythmic gymnasts.

Method: 46 artistic and rhythmic gymnasts including both males and females participants completed 2 separate protocols to examine changes in static and dynamic balance respectively.

Procedure: The control group includes static stretching (ss), 6 repetitions of 6 s stretches of calf muscle followed by 5 min of jogging before and After the ss. Experimental group consist of 6 repetitions of 6 s stretches ss and 5 min of jogging before and after the ss, followed by i.a.s.t.m of calf muscle. Static balance was evaluated on zebris medical gmbh, where as for dynamic balance, s.e.b.t. was performed.

Results: For control group results suggest that stretching protocol have effect on reducing side-to-side sway ($p=0.083$) but has no effect in reducing path length ($p=0.523$), average velocity ($p=0.283$) and forward-backward sway ($p=0.766$) measures for static stability. S.e.b.t composite score showed significant results for right ($p=0.00$) and non-significant for left ($p=0.90$) lower extremity. Results of experimental group revealed a highly significant difference in path length ($p=0.007$), average velocity ($p=0.005$) and no significant difference for forward- backward sway ($p=0.378$) and side to side sway ($p=0.148$). S.e.b.t composite score showed highly significant results for right ($p=0.000$) and left ($p=0.000$) lower extremity.

Conclusion: i.a.s.t.m. before training sessions along with active static stretch of calf before and after aerobic exercise is affective in improving static and dynamic balance immediately.

Ashimaarora2708@gmail.com