Journal of Sports Medicine and Therapy

Volume - 9, Issue - 4

Case Report **Published Date:-2024-11-14 11:01:22**

Symmetry of Shank Muscle Strength, Passive Stiffness and Plantar Pressure Following IASTM Accompanied by Electrotherapy in a Case with Severe Ankle Stiffness

Excessive ankle stiffness can greatly impact mobility, leading to discomfort, difficulty in walking, and limited Range of Motion (ROM). We aimed to identify and address the symmetry of shank muscle strength, ankle passive stiffness, and plantar pressure distribution, in a patient with unilateral excessive ankle stiffness, utilizing Instrument-Assisted Soft Tissue Mobilization (IASTM) accompanied by Faradic Electrical Stimulation (FES).
The patient's muscle strength and ROM which had diminished due to 3.5 years of ankle immobilization post-rescue from amputation, underwent a 12-week program involving IASTM and FES. The plantar and dorsiflexion muscles' torque, ROM, and plantar pressure were measured using an isokinetic and plantar distribution system before and after the intervention. Symmetry of muscle torque, ROM, and plantar pressure between two limbs were calculated for pre and post-test.
Results indicated improvement in the ratio index of the concentric/eccentric dorsi- and plantar-flexion peak torque and dorsi- and plantar-flexion work, ROM, gait line length, and contact time after a 12-week intervention.
The study suggests that IASTM and FES are effective interventions for restoring symmetry in a patient with post-operation complications, highlighting the need for further research on similar cases.

Editorial **Published Date:-2024-11-07 16:53:51**

Transforming Cancer Care through Physical Exercise: A Path to Holistic Healing

The role of physical exercise in cancer treatment is gaining increasing recognition as part of a holistic approach to patient care. Traditionally, cancer treatment has focused on surgical, hormonal, chemotherapeutic, as well as radiotherapeutic interventions. However, recent studies underscore the significant benefits of integrating physical exercise into treatment plans, not merely as a supplementary activity but as a core component of cancer care [1].

Research Article **Published Date:-2024-10-02 14:35:50**

Effects of Preoperative Training on Static and Dynamic Balance among Female Athletes with Injured ACL

Aims: The purpose of this research was to study the effects of preoperative training on static and dynamic balance among female athletes with injured ACLs.
Methods: This semi-experimental study involved a 2-group pretest-post-test design. Subjects were 36 (19 control and 17 experimental) female athletes with injured ACLs, that were chosen with the available sampling method. The experimental group did the preoperative training in the eight weeks and the control group did not participate in any training program during this period. Static and dynamic balance and lower body muscle strength were measured. The paired sample T-test was used to compare pre and post-test results and the independent sample T-test achieved comparisons between the two groups.
Results: The results indicated that static (with eyes opened and closed) dynamic balance and muscle strength were improved significantly ($p < 0.05$) in the exercise group, but no significant change ($p > 0.05$) was found in the control group. Also, significant differences were found in improvement changes results between the two groups ($p < 0.05$).
Conclusion: Results of the study confirmed that preoperative training can have a beneficial effect on improving static and dynamic balance among female athletes with injured ACLs.
