The Effects of a 6 Week Ankle Specific Neuromuscular Training (NMT) Program on Chronic Ankle Instability, Post Modified Brostrom-Gould Procedure.

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Background and Purpose: Lateral ankle sprains are a common sport related injury seen by clinicians and therefore warrants the need for a more comprehensive post-sprain rehabilitation protocol. Studies show that inadequate strength and response of the supportive ankle musculature poses the greatest risk for recurrent ankle sprains, necessitating the need for proprioceptive based functional rehabilitation programs. The purpose of this case report is to detail the effects of a 6 week proceptive ankle specific NMT program on ankle stability and mobility, in a post-surgical patient who has had chronic ankle instability (CAI).

Case Description: A 24 year old female, who had a history of chronic ankle sprains, sustained a grade 3 ankle sprain after falling incorrectly. The patient took part in the 6 week program to address her persistent right ankle instability, pain, swelling and tenderness.

Outcomes: The Foot & Ankle Ability Measure (FAAM) was used to measure lower extremity strength and endurance as it relates performance of activities of daily living (ADLs) and sports. The singe leg stance (SLS) test used to measure static balance. Manual muscle testing (MMT), range of motion (ROM), and gait patterns were also tracked and assessed in conjunction with primary outcome measures.

Discussion/Conclusion: NMT was performed over a period of six weeks, at a frequency of two sessions a week with each session lasting 45 minutes. The date collected from each outcome measure, suggests that an ankle specific NMT strengthening program for post-surgical patients with chronic ankle instability maybe beneficial.