

Effect of Ankle and Foot joints mobilization on Stability improvement, analyzed by Computerized Dynamic Posturography.

The aim of the study was to observe if joint mobilization of ankle and foot joints would improve the stability using the by Computerized Dynamic Posturography (neurocom) as a measurement tool. The methods that are used from the research are based on the knowledge which was obtained during the study of physiotherapy program at FTVS UK.

All the participants are between the ages of 20 to 30 years, with no specific diagnose. All the 40 participants were being randomly divide into 2 groups. The control group and the experimental group, each group will have their Stability tested twice on the CPD (NeuroCom). The control group will be measured first, and after 20 minutes they will be measured again without any examination or therapeutic intervention. The experimental group was measured twice, first before the examination of joint play and the therapy, then the examination of joint play was done and any restricted joints were noted and treated, later, the participants were measured again for possible improvement. Joint play examination and therapy take about 20 minutes. Stability analyses take about 20 minutes too. The project doesn't include subjects with severe lower extremity injuries (eg, fractures, recurrent disorder last year), subjects with sensory disabilities, people with cerebral palsy, acute illness or injury and convalescence after illness or injury affecting research results.

As a result, the intervention of Ankle and Foot mobilization according to Lewit had positive effect on stability comparing with individuals of no- intervention group. Nevertheless, the one-time session of joint mobilization did not show substantial improvement on stability. Therefore, combined joint mobilization with other stability exercises and kinesiological and medical assessment in multi- sessions is suggested for preferable results of visual, proprioceptive and vestibular components to maintain postural stability.

Key words: Kinesiology, Manual Therapy, Proprioception, NeuroCom