



EFFECT OF CRYOCOMPRESSION AND TISSUE FLOSSING ON HAND SPASTICITY AND FUNCTION – A RANDOMIZED CLINICAL TRIAL

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ABSTRACT

BACKGROUND: Neuromuscular impairments causing spasticity, often demonstrate poor hand function and problems with dexterity. Spasticity of the wrist and finger flexor muscles hinder with the performance of daily activities leading to functional limitations.

AIM: The aim of the study was to evaluate and compare the effect of Cryo Compression and Tissue Flossing on hand spasticity and its function.

METHODS: Twenty eight adults with hand impairment were recruited in the study and randomly allocated to two groups. Group A received Cryocompression therapy while Group B was given Tissue Flossing for 10 sessions in 2 weeks. The outcome measures used in the study were Modified Ashworth Scale for spasticity assessment and Wolf Motor Function Test for hand function evaluation. All the outcome measures were assessed at the beginning and at the end of the intervention.

RESULTS: There was no significant difference seen in the demographic characteristics between the two groups. Both the groups showed improvements in the Modified Ashworth Scale and Wolf Motor Function Test scores from pre to post intervention but no significant improvement was seen post intervention, in the Modified Ashworth Scale scores between the two groups. However Tissue Flossing group illustrated significant improvement in the Wolf Motor Function Test scores post intervention when compared to the Cryocompression group. ($p < 0.05$)

CONCLUSION: This study supports the use of Cryocompression and Tissue Flossing, as a useful treatment technique to manage spasticity. However Tissue Flossing offers an added benefit of greater enhancement in the hand functions in patients with upper limb dysfunctions.

KEYWORDS: Hand spasticity, hand function, cryo compression, tissue flossing, theraband x trainer

DESCRIPTION:

Kajal Shivalkar is a Post Graduate student at KLES Institute of Physiotherapy in India. She gained her Bachelor's degree in the same institute as mentioned earlier. During the course of her Bachelor's degree, and while pursuing her internship she developed a keen interest in Neurology Physiotherapy, which led her to pursue post-graduation in it. Kajal Shivalkar will be presenting her master's thesis wherein she studied the effect of Cryocompression and Tissue Flossing on hand spasticity and function in patients with upper extremity impairment.