

# Comparison of the Effectiveness of Ischemic Compression, Dry Cupping and Combined Therapy for Treating Myofascial Trigger Points

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Myofascial trigger points (TPs) are a main contributing factor for musculoskeletal pains. TPs are hyperirritable zones with pain in a taut band of muscle. TPs may decrease range of motion, reduce strength and increase pain with muscle stretching. Ischemic compression is a well-established treatment for TPs. Cupping therapy is an alternative medicine modality emerging in western medicine. Combination of these modalities to treat TPs is a novel concept. This experimental study aimed to compare the effectiveness of ischemic compression, cupping and combination of these two therapies for treating TPs in 24 non-specific neck pain (NP) patients presented with upper trapezius muscle. TPs were randomly assigned into 3 groups; cupping= 9, ischemic compression = 7 and combined therapy= 8. Ischemic Compression performed by therapists' thumb and cupping therapy was performed by plastic cups and vacuum pump. Combined therapy group received both therapies; cupping therapy followed after the ischemic compression. Patients received treatments for 2 times a week for 4 weeks. TPs' Pressure Pain Threshold (PPT) and Neck range of motion were measured by manual algometer and Global Posture System before and after every session. Level of neck disability was assessed by Neck Disability Index (NDI) in first, fifth and last sessions. PPT values and NDI scores improved significantly ( $P < 0.05$ ) after the eight therapy sessions in the three groups. Neck Flexion, extension and right lateral flexion were improved in all groups. Within the confines of this study, cupping therapy and combined therapy were effective as ischemic compression in reducing pain related to TPs and in improving the quality of life.

**Keywords:** Trigger point, Ischemic compression, Cupping therapy