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Effect of Myokinetic Stretching Technique on Pain and Range of Motion in Individuals with Upper Trapezius Trigger Points: A Study Protocol

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Introduction: The most common causes of non specific neck pain are myofascial or mechanical disorders. Among these, trigger points is the most important broad, long- lasting muscle disorder that impact people of all ages and socioeconomic backgrounds, irrespective of their work, physical characteristics, or degree of physical activity. An innovative technique for managing trigger points is the Myokinetic Stretching Technique (MST), a form of myofascial release, which involves active or passive stretching and movement as well as muscle energy techniques until a desirable release from the taut band is achieved.

Need of this study: In patients with upper trapezius trigger points, the MST is expected to improve cervical range of motion, improve the pain pressure threshold, and substantially reduce pain intensity.

Aim: To evaluate the efficacy of the MST in reducing pain and improving range of motion in individuals with upper trapezius trigger points.

Materials and Methods: A quasi-experimental study will be conducted on 40 individuals; aged 20-30 years with active upper trapezius trigger points. Participants will be undergoing two-week intervention involving MST thrice per week (total 6 sessions) on alternate days. Pain intensity will be measured using the Numerical Pain Rating Scale (NPRS), Pressure Algometry will be used to measure Pain Pressure Threshold (PPT), Universal goniometry will be used to measure Cervical Range of Motion (CROM) and Neck Disability Index (NDI) will be used to assess functional disability of neck. Pre- and Post-intervention data will be analysed. Ethical approval was granted by the institute's Ethics Committees (IEC-2996) and the CTRI registration number CTRI/2024/09/073719.

Keywords: Neck Disability Index, Pain pressure threshold, Universal goniometry.