A comparative study to find out the effectiveness of muscle energy technique versus myofascial trigger point release of upper trapezius in mechanical neck pain

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Background: Mechanical neck pain is a common problem within our society. Neck pain as defined by Mersky is the pain “anywhere within the region bounded superiorly by superior nuchal line, inferiorly by an imaginary line through the tip of first thoracic spinous process and laterally by sagittal plane tangential to the lateral borders of the neck. Upper trapezius and the levator scapulae are the most common postural muscles that tend to get shorten leading to restricted neck mobility.

Objectives: To evaluate the comparative effectiveness of muscle energy technique (MFT) and myofascial trigger (MFTr) point release of upper trapezius in mechanical neck pain.

Methods: It was a comparative experimental study. This study includes (N=40) subjects with mechanical neck pain within age group of 25-45 years. They were randomly assigned into 2 groups (Group A and B). Group A had 20 (N=20) subjects who are treated with myofascial trigger point release, Group B had 20 (N=20) who are treated with muscle energy technique. The subjects were given intervention 3 sessions per week for 4 weeks.

Results: Paired sample t-test was used for within group analysis. Independent sample t-test was done to analyze between group variables. No significant difference was found in NDI (p<1.18), SFMPQ (p<1.17), ROM (p<1.91) between MET and MFTr groups while within the groups all outcome measures shows significant difference in both MET and MFTr groups (p=0.00).

Conclusion: This study concluded that both the treatment techniques, MET and MFTr were effective in alleviating the mechanical neck pain in terms of decreasing pain intensity, increasing functional ability and increasing active cervical range of motion as there was no significant difference between the two groups, however MET was superior than MFTr in decreasing pain intensity, increasing the functional ability and increasing the active cervical range of motion.

Biography
Abhijit Dutta has completed his Bachelor’s in Physiotherapy in 2003 from Rajiv Gandhi University of Health Sciences, Karnataka, India. He then joined as a full time Clinical Therapist at Down Town Hospitals Pvt. Ltd. in 2004 and worked in the Dept. of Physiotherapy till 2007. He has completed his Master’s in Physiotherapy from 2007-2009 from Rajiv Gandhi University of Health Sciences, Karnataka, India. In 2009, he joined as a Lecturer and as a Clinical Therapist in the same organization. At present, he is working as an Associate Professor and as Head of the Department of Physiotherapy in Assam Down Town University with a total experience of 10yrs of both clinical and academics. He is also pursuing PhD from the same university. He has around 15 publications in International Journal of Physiotherapy and has guided around 12 PG students in their research work. He is a life time member of Indian Association of Physiotherapists and an executive member of All Assam Physiotherapy Association. He has been awarded with Significant Contribution award at Agartala India in August 2015 and Young Achiever Award at AIIMS, New Delhi.

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