



Converging Healthcare &amp; Technology

**INTERNATIONAL JOURNAL OF CONVERGENCE IN HEALTHCARE**Published by  
IJCIH & Pratyaksh Medicare LLPwww.ijcih.com  
doi.org/10.55487/ijcih.v3i1.136

# Effect of Active Release Technique and Muscle Energy Technique on Cognition and Trigger Point of Upper Trapezius in District Level Pistolshooters - An Annotated Bibliographic Review

Anamika Mishra<sup>1</sup>, Pooja Sharma<sup>2</sup>, Kshitija Bansal<sup>3</sup>, Irshad Ahmad<sup>4</sup>

<sup>1</sup>Post Graduate MPT student, Department of Physiotherapy, Manav Rachna International Institute of Research & Studies, Faridabad, <sup>2</sup>Associate professor, Faculty of Allied Health Sciences, Manav Rachna International Institute of Research & Studies, Faridabad, <sup>3</sup>Associate professor, Faculty of Allied Health Sciences, Manav Rachna International Institute of Research & Studies, Faridabad, <sup>4</sup>Assistant Professor, Faculty of Allied Health Sciences, Manav Rachna International Institute of Research & Studies Faridabad

## Abstract

[Purpose] Currently, these days general population of 45% and 54% is affected by mechanical neck pain at some point in their life that can also lead to severe disability. During air-pistol competitions heightened stress would deteriorate shooters abilities to maintain gun stability, thereby resulting in inferior performance. In order to stabilise the gun muscular work of shooter's shoulder and forearm are majorly involved to improve performance in Air Pistol Olympic Shooting and it is widely agreed that the ability to stabilize the gun is crucial for performance in pistol shooting. [Relevance] Therefore, an effective intervention and exercise protocol that reduces pain as well as release the trigger points of upper trapezius must be devised so that incidence of muscle tightness at shoulder and neck can be lowered in shooters at training level. The aim of the study was to review the current available literature on effect of active release technique and muscle energy technique on cognition and trigger points of upper trapezius in district level pistol shooters. [Participants] Nine full text articles were included for this review. [Methods] A literature search was performed using Google Scholar with the term active release technique, muscle energy technique, cognition and upper trapezius trigger points. The articles were checked thoroughly and were reviewed. [Results] Significant improvement in cognition and cervical flexion ROM which was restricted earlier and gradual decrement in pain at trigger points was also observed in group receiving muscle energy technique. [Conclusion] Muscle energy technique proved beneficiary in improving cognition and reducing pain and restricted ROM due to trigger points, so can be used as an adjunct to conventional physiotherapy management. [Implications] Integrating muscle energy technique in management of upper trapezius trigger points would show better results than conventional exercises alone for cases of upper trapezius trigger points presence along with affected cognition in pistol shooters.

**Keywords:** Cognition, Active release technique, Muscle energy technique, Trigger points.