Marzieh Yassin et al., J Spine 2017, 6:4(Suppl)
DOI: 10.4172/2165-7939-C1-005

The effects of myofascial trigger point on preparatory brain activity and anticipatory postural control associated with voluntary unilateral arm flexion

Marzieh Yassin[1], **Saeed Talebian**[2], **Ismail Ebrahimi Takamjani**[1], **Nader Maroufi**[1], **Amir Ahmadi**[1] and **Javad Sarrafzadeh**[1]
[1]Iran University of Medical Sciences, Iran
[2]Tehran University of Medical Sciences, Iran

Aim: Neck pain is a common disorder in industrial countries. With upto 37% of individuals have developing and persistent symptoms. In addition, neck pain imposes a considerable economic burden on the health care system. Although there are many potential contributing factors to neck pain, Myofascial Trigger Point (MTP) is known as the chief cause of headache and neck pain. Aim of this study was to investigate the effects of arm movement on anticipatory postural control in patients with upper trapezius MTP.

Methods: 15 women (aged 26.8±2.67 years) with one active MTP and, fifteen women (aged 27.53±3.73) with one latent MTP in the upper trapezius and, 15 normal women (aged 27.73±3.43 years) were participated in this study. Participants were asked to flex their arms in response to a sound stimulus preceded by a warning sound stimulus.

Results: There were significant differences in average, peak, and area of Contingent Negative Variation (CNV), Post-imperative Negative Variation (PINV), motor times, and for reaction time (P<0/001) between active and control group. There were not significant differences in Electromyography (EMG) measurements between passive and control group but there were significant differences in CNV measurements (P<0/001).

Conclusion: CNV and EMG were changed in patients with active MTP. These patients had less compatibility with environmental stimulus and responded to a specific stimulus. The present study shows that CNV can be a new method for evaluation of the MTP.

Biography

Marzieh Yassin is a Visiting Professor at Iran University of Medical Sciences, Iran and specializes in the field of Physical Therapy, Biomechanics, Neuroscience, Myofascial Trigger Point.

m.yassin.pt@gmail.com

Notes: