

Comment on Huma Tabassum, et al. (*J Pak Med Assoc.* 2024; 74(1): 10-15)

Comparison of muscle energy technique and facet joint mobilisation in the patient with chronic neck pain: A randomized controlled trial

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The neck region stands out as the most common site for musculoskeletal symptoms, with neck pain ranking as the 4th leading cause of disability.¹ The research paper published by Tabassum H et al on the management of neck pain, offers valuable insights into the effects of facet joint mobilization and Muscle Energy Techniques (MET), in the management of this prevalent and important condition. However, we would like to take this opportunity to present certain considerations; which may provide a more nuanced perspective regarding the effects and comparison of these interventions.

It is important to recognize that there can be numerous causes of neck pain, as symptoms may arise from various structures including muscles and joints.^{2,3} Similarly, different treatment techniques target specific structures or sources of symptoms, and understanding this diversity is crucial in tailoring interventions effectively. It is evident and well established that MET primarily addresses the contractile component of musculoskeletal dysfunction, focusing on both active and passive muscle tone.³⁻⁶ On the other hand, facet joint mobilization targets the articular/non-contractile aspect of the musculoskeletal dysfunction, specifically the facet/zygapophyseal joint.^{2,7} The dichotomy between these two treatment approaches highlights their potential effectiveness based on the underlying cause of patient's symptoms. Thus, MET emerges as a logical and effective intervention in cases where the source of patient's symptoms is muscular.³⁻⁶ Conversely, facet joint mobilization presents as a more rational and effective intervention, when the symptoms originate from the articular component.^{2,7} Nevertheless, the aforementioned study compares the effects of these two techniques, regardless of their distinctive structural and biomechanical targets.

However, in our humble opinion, it is crucial to recognize that MET and facet joint mobilization address different aspects of musculoskeletal dysfunction, making a direct

comparison perplexing. If we look at the inclusion criteria of the current study, it is apparent that no such components were included which can help to distinguish if the participants with neck pain had muscular or articular origins. Consequently, a more comprehensive understanding of the specific etiology of neck pain is crucial, which would provide invaluable context to interpret the outcomes precisely. Otherwise, there is a risk of misinterpreting the results or drawing inaccurate conclusions from the study findings. For instance, the results of this study indicate that MET is more effective in improving range of motion (ROM), as compared to facet joint mobilization ($p < 0.05$) after 4 weeks of treatment, as shown in the post-hoc results reported in Table 3. This might lead to confusion about whether MET is genuinely more effective than facet joint mobilization in terms of ROM, regardless of the structural source of symptoms, or if the effectiveness stemmed from the fact that study consisted of more patients with muscular sources of symptoms. Similarly, the opposite is applicable to the findings in terms of cervical lordosis in which facet joint mobilization was found to be more effective. Furthermore, it would have enhanced the interpretability of the results for the audience if the 2nd week follow-up results of cervical lordosis and ROM were included in Table 3, similar to the presentation of Numeric Pain Rating Scale (NPRS) in Table 2. Moreover, presenting the median and interquartile range of individual groups for NPRS in Table 2, along with post-hoc analysis would have provided additional clarity in detecting significant differences between the 3 groups.

In conclusion, while the study contributes significantly to the evidence on the treatment of neck pain, it is imperative to acknowledge the inherent differences between MET and facet joint mobilization, and the biomechanical entities they target. It is evident that both facet joint mobilization and MET are effective techniques in the management of neck pain.²⁻⁷ However, considering the multifaceted nature of neck pain, future studies can benefit from a more stratified approach, with tailored interventions based on the biomechanical source of symptoms, enhancing our understanding of the optimal techniques for neck pain based on the source of symptoms.

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