Safety of thrust joint manipulation in the thoracic spine: a systematic review

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Dear Editor,

We read with interest the article titled '*Safety of thrust joint manipulation (TJM) in the thoracic spine: a systematic review*' in a recent issue of *Journal of Manual and Manipulative Therapy*.¹ The authors should be commended for the quality of the review and for increasing awareness about TJM in general. However, it is not appropriate to use case reports as a measure of safety. This ignores the importance of the denominator, as case reports do not provide this. We believe that 'Adverse Events following TJM' would have been a more appropriate title for the article, rather than 'Safety of TJM'.

While we agree with the authors about the risks associated with TJM of the spine and acknowledge that clinical trials, which include TJM, usually exclude patients with known contraindications, we would like to express concern regarding the interpretation of adverse events (AEs) from thoracic TJM portrayed in this article. In stating that 'unwanted side effects are quite common following TJM', the authors quote studies that reported 'short-term, mild in nature, non-serious, transient and reversible' side effects at rates ranging from 60.9% across all spinal regions (25.7% of these in the thoracic spine) to eight out of 10 thoracic manipulations in people with acute neck pain.¹ We are not suggesting that side effects from TJM be ignored or dismissed. However, it would be more accurate to represent the number of serious AEs relative to the total number of TJMs. While this may be difficult to quantify, any discussion about AEs should consider this aspect. As an example, our work on chronic

obstructive pulmonary disease (COPD),²⁻⁴ which used two of the three techniques described by Puentedura and O'Grady, would most likely be overlooked in a review of AEs related to thoracic TJM because the technique was not being used to treat a musculoskeletal disorder. To date, we have administered 590 thoracic TJMs to people with COPD between the ages of 49–89: 144 using a supine technique² and 446 using a seated technique.^{3,4} There were 92 mild AEs reported in these trials at a rate of 15.6% and no moderate or serious AEs. We support the recommendation that all clinicians should perform a thorough examination and rely on sound clinical reasoning before administering TJM. If TJM is to remain an effective intervention in the management of a range of disorders, then clinicians need to ensure that the intervention is safe and take all measures to reduce any associated risk.

References

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