**Article Full Title**

Spinal manipulative therapy for acute low‐back pain

**Author Names**

Rubinstein, S. M., Terwee, C. B., Assendelft, W. J., de Boer, M. R., & van Tulder, M. W.

**Reviewer Name**

Nikol Papa, SPT

**Reviewer Affiliations**

Duke University School of Medicine, Doctor of Physical Therapy Division

**Paper Abstract**

This review seeks to study the effects of SMT for acute low‐back pain. SMT in this case includes both spinal mobilization and manipulation. Many systematic reviews have been conducted appraising the efficacy of SMT on LBP; however, few have been directed at acute LBP specifically, with even fewer still being meta analyses. This current review seeks to update the previous Cochrane review on SMT for acute LBP for three main reasons. One, previous estimates on the usefulness of SMT were based on smaller studies with a high risk of bias. Two, several RCTs have been conducted since the 2004 review which follow updated methodology for carrying out systemetic reviews, new criteteria for assessing risk of bias, and evaluating the strength of evidence. Three, this review follows the most recent guidelines released by both the Cochrane Collaboration and the Cochrane Back Review Group.

**NIH Risk of Bias Tool**

Quality Assessment of Systematic Reviews and Meta-Analyses

1. **Is the review based on a focused question that is adequately formulated and described?**

Yes

1. **Were eligibility criteria for included and excluded studies predefined and specified?**

Yes

1. **Did the literature search strategy use a comprehensive, systematic approach?**

Yes

1. **Were titles, abstracts, and full-text articles dually and independently reviewed for inclusion and exclusion to minimize bias?**

Yes

1. **Was the quality of each included study rated independently by two or more reviewers using a standard method to appraise its internal validity?**

Yes

1. **Were the included studies listed along with important characteristics and results of each study?**

Yes

1. **Was publication bias assessed?**

Yes

1. **Was heterogeneity assessed? (This question applies only to meta-analyses.)**

Yes

**Key Finding #1**

SMT appears to be no better than other existing therapies for pain reduction and improvement of functional status

**Key Finding #2**

The decision to refer for SMT should be based upon costs, preferences of the patient and providers, and relative safety of the various treatment options

**Key Finding #3**

**Key Finding #4**

**Please provide your summary of the paper**

The authors did not find evidence to support the use of SMT on acute LBP similar to the previously released cochrane review. However, the findings rest more in the realm of inconclusivity due to the fact that two thirds of the included studies had a high risk of bias. The task the researchers set for themselves is inherently difficult as individuals with acute LBP have much better odds of their pain resolving on its own compared to chronic low back pain. Additionally, it is hard to catch significant differences in margins of change that are so small considering individuals with acute LBP are more likely to be close to their baseline status. In other words, SMT may be helpful when working with acute LBP patients, but the question is whether or not this intervention actually adds anything to the recovery trajectory patients with acute LBP are most likely going to follow anyway.

**Please provide your clinical interpretation of this paper. Include how this study may impact clinical practice and how the results can be implemented.**

Most of the studies in this review had a high risk of bias but there were a couple of studies that had small to moderate findings in support of using SMT for treating acute LBP. The article itself mentioned, while the findings are inconclusive at best, there are still clinicians that utilize SMT for acute LBP and note positive outcomes and increased functional ability in their patients. Clinicians reading this article should continue to do their best to stay up to date on the development of outcomes related to using this intervention but also must not discredit their clinical experience and clinical judgement when working with patients that have acute LBP.