Reviewer's report

Title: Osteopathic Manipulative Treatment for Low Back Pain: A Systematic Review and Meta-Analysis of Randomized Controlled Trials

Version: 1 Date: 10 December 2004

Reviewer: Dan Cherkin

Reviewer's report:

General

The purpose of this study, to assess the efficacy of OMT as a complementary treatment for low back pain may be a worthy one, at least in theory. There have been numerous literature syntheses and meta-analyses of the 40 or 50 RCTs evaluating spinal manipulation of various types for back pain, but no recent reviews of the subset of trials that included osteopathic manipulation. Unfortunately, it is not clear that the six OMT trials identified by the authors are of adequate quality and homogeneity to warrant the application of meta-analytic methods. It is also not clear that osteopathic manipulation differs enough from other forms of spinal manipulation to warrant a separate analysis. Unfortunately, the manuscript focuses almost exclusively on the meta-analysis methods and results and pays little attention to the broader context of the review, particularly, whether OMT is really different than other forms of manipulation, whether the six OMT trials are of high enough quality and homogeneity to warrant conducting a meta-analysis. My impression is that these studies are extremely heterogenous in many ways and that their quality is mixed.

Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

To be a useful contribution to the literature, this manuscript would need to:
1. justify why it is believed that OMT is somehow different than other forms of spinal manipulation.
2. justify that the OMT trials of adequate methodological quality to warrant inclusion in a meta-analysis
3. justify the use of meta-analysis of trials that are clearly very different in many ways. the fact that a statistical test didn't provide evidence that these 6 trials were not heterogenous does not prove that they are homogeneous. a quick look at their differences suggests they are very different.
4. provide an indication of the clinical significance of any observed effects of OMT

Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

Discretionary Revisions (which the author can choose to ignore)

What next?: Unable to decide on acceptance or rejection until the authors have responded to the major compulsory revisions

Level of interest: An article of importance in its field

Quality of written English: Acceptable
Statistical review: Yes

Declaration of competing interests:
I declare that I have no competing interests