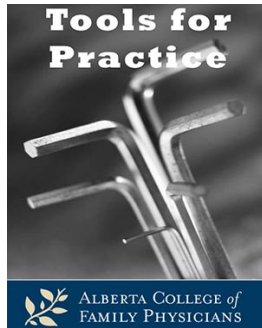


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Manipulating Research for Spinal Manipulative Therapy for Low Back Pain

Clinical Question: Is spinal manipulative therapy (SMT) effective for low back pain (LBP)?

Bottom Line: Research around SMT is poor, consistently inconsistent, and almost impossible to interpret. Likely no reliable effects in acute LBP, but possible small effects in chronic LBP, at best improved pain (≤ 0.9 points out of 10) and recovery (for one in ~11 patients at one month) but two thirds of comparisons found no effect.

Evidence:

>20 systematic reviews. The largest and highest quality presented (with pain scores out of 10):

- Acute LBP (<6 weeks): 20 RCTs (2,674 patients).¹
 - Pain: 3/17 comparisons statistically significant:
 - Two based on single studies.
 - One 0.6 points better after one month.
 - No difference in recovery.
- Chronic LBP (>12 weeks): 26 RCTs (6,070 patients).²
 - Pain: 11/29 comparisons statistically significant, pain 0.3-0.9 points better (mostly one month).
 - Increased chance of recovery in some comparisons, best Number Needed to Treat=11 (one month).
- Other Findings:
 - Functional Status: 4/18 (acute) and 9/27 (chronic) comparisons statistically significant but mostly questionable clinical significance.^{1,2}
 - Osteopathic SMT:³ 15 RCTs (1,502 patients), pain 1.3 better.³
 - Chiropractic SMT combined with other therapy:⁴ 12 RCTs (2,887 patients), pain 0.5 better.⁴
 - Others reviews vary from negative^{5,6} to supportive.^{7,8}
- Multiple issues:
 - SMT often combined with one or more interventions (exercise, education, medications, mobilization, sham, etc.) then compared to another cluster of interventions, which may not overlap at all.^{1,2,9}

- Unclear which, if any, intervention is working.
- Large variations in outcomes, measurement scales, study duration, type of SMT, type of provider, number of providers, and number of treatments.^{9,10}
 - Results in multiple analyses (like 91 meta-analyses in one study).²
- Studies low quality (mean quality score 33%).¹
- Reviews authored by SMT providers may be poorer quality and more positive.¹¹

Context:

- In one Saskatchewan LBP study, 29% consulted a chiropractor.¹²
- Toward Optimized Practice (TOP) guideline:¹³
 - Insufficient evidence for or against SMT in preventing LBP or treating chronic LBP.
 - If not recovering from acute LBP, SMT “may benefit.”

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Disclosure:

Authors have no conflicts of interest to declare.

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Tools for Practice is a biweekly article summarizing medical evidence with a focus on topical issues and practice modifying information. It is coordinated by G. Michael Allan, MD, CCFP and the content is written by practising family physicians who are joined occasionally by a health professional from another medical specialty or health discipline. Each article is peer-reviewed, ensuring it maintains a high standard of quality, accuracy, and academic integrity. If you are not a member of the ACFP and would like to receive the TFP emails, please sign up for the distribution list at <http://bit.ly/signupfortfp>. Archived articles are available on the ACFP website.

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