Low Back and Thoracic Conditions



Chiropractic management of low back pain (LBP)

A 2016 evidence-informed and consensus-driven guideline provided an update of the best practice recommendations for chiropractic management of LBP. To substantiate care, a definite improvement in a patient's functional capacity should be documented using a measurable outcome, such as the following¹:

- Pain scales such as the visual analog scale and the numeric rating scale.
- Pain diagrams that allow the patient to demonstrate the location and character of their symptoms.
- Validated ADL measures, such as the Revised Oswestry Back Disability Index, Roland Morris Back Disability Index, RAND 36, and Bournemouth Disability Questionnaire.
- Increases in home and leisure activities, in addition to increases in exercise capacity.
- Increases in work capacity or decreases in prior work restrictions.
- Improvement in validated functional capacity testing, such as lifting capacity, strength, flexibility, and endurance.

Spinal manipulative therapy (SMT)

- A 2014 systematic review found limited high quality evidence for the effectiveness of SMT for mid and low back pain in adults.²
- Another systematic review in 2014 focusing on osteopathic manipulation found clinically relevant effects for reduced pain and improvement in functional status for patients with acute and chronic nonspecific LBP.³
- A 2011 review reported found "high-quality evidence that SMT has a small, significant, but not clinically relevant, short-term effect on pain relief in comparison with other interventions" for chronic LBP. This review, as well as an updated Cochrane review, also found varying but primarily low quality evidence in support of the use of SMT for short-term pain relief and functional status/disability when added to another intervention.^{4,5}

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Acute and sub-acute	2-3x/wk for 2-4 weeks, re-eval in 2-4 wks
Recurrent/flare-up	1-3x/wk for 1-2 weeks, re-eval in 1-2 wks
Chronic	1-3x/wk for 2-4 weeks, re-eval in 2-4 wks
Mild exacerbation of chronic	1-6 visits per episode, re-eval at beginning of each episode of care
Moderate to severe exacerbation of chronic	2-3x/wk for 2-4 weeks, re-eval in 2-4 wks
Scheduled ongoing care for chronic pain	1-4 visits/month, re-eval every 6 visits or as needed
management	

• Expert consensus recommends the following dosages for spine-related pain^{1,6}:

Exercise

- The results of a 2016 systematic review and meta-analysis of randomized control trials (RCTs) reported that exercise, in combination with patient education, is likely to reduce the risk of LBP. Additionally, exercise alone may reduce the risk of an episode of LBP and sick leave due to LBP in the short-term (up to 1 year). They also reported that the available evidence does not support the use of back belts, shoe insoles, and ergonomics in the prevention LBP.⁷
- A 2013 review on idiopathic scoliosis found potential advantages resulting from physiotherapy, including reduction in Cobb angle, reduction in risk of progression compared with the natural history of idiopathic scoliosis, and improvement in clinical parameters with fewer patients requiring brace treatment and fewer patients requiring surgical treatment.⁸

References

- 1. Globe G, Farabaugh RJ, Hawk C et al. Clinical Practice Guideline: Chiropractic Care for Low Back Pain. *J Manipulative Physiol Ther.* 2016 Jan 9. pii: S0161-4754(15)00184-0. https://www.ncbi.nlm.nih.gov/pubmed/26804581
- Clar C, Tsertsvadze A, Court R, Hundt GL, Clarke A, Sutcliffe P. Clinical effectiveness of manual therapy for the management of musculoskeletal and non-musculoskeletal conditions: systematic review and update of UK evidence report. *Chiropr Man Therap.* 2014;22(1):12. FREE FULL TEXT https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3997823/
- Franke H, Franke JD, Fryer G. Osteopathic manipulative treatment for nonspecific low back pain: a systematic review and meta-analysis. *BMC Musculoskelet Disord*. 2014 Aug 30;15:286. FREE FULL TEXT http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4159549/
- 4. Rubinstein SM, van Middelkoop M, Assendelft WJ, de Boer MR, van Tulder MW. Spinal manipulative therapy for chronic low-back pain: an update of a Cochrane review. *Spine (Phila Pa 1976).* 2011 Jun;36(13):E825-46. http://www.ncbi.nlm.nih.gov/pubmed/21593658
- 5. Walker BF, French SD, Grant W, Green S. A Cochrane review of combined chiropractic interventions for low-back pain. *Spine (Phila Pa 1976)*. 2011 Feb 1;36(3):230-42. <u>http://www.ncbi.nlm.nih.gov/pubmed/21248591</u>
- Baker G, Farabaugh RJ, Augat TJ, Hawk C. Algorithms for the chiropractic management of acute and chronic spine-related pain *Top Integrative Health Care*. 2012;3(4). FREE FULL TEXT <u>http://www.tihcij.com/Articles/Algorithms-for-the-Chiropractic-Management-of-Acute-and-Chronic-Spine-Related-Pain.aspx?id=0000381</u>
- 7. Steffens D, Maher CG, Pereira LS et al. Prevention of Low Back Pain: A Systematic Review and Meta-analysis. *JAMA Intern Med.* 2016 Feb 1;176(2):199-208.https://www.ncbi.nlm.nih.gov/pubmed/26752509
- 8. Kotwicki T, Chowanska J, Kinel E, Czaprowski D, Tomaszewski M, Janusz P. Optimal management of idiopathic scoliosis in adolescence. *Adolescent Health, Medicine and Therapeutics*. 2013;4:59-73. **FREE FULL TEXT** http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3912852/