

Spine Related Pain

Spinal manipulative therapy (SMT) for low back pain (LBP)

In 2010 and 2014, evidence was found for the effectiveness of SMT for acute, subacute, and chronic low back pain in adults^{1,2}

Adherence to clinical practice guidelines – management of acute and subacute low back pain

A 2014, best evidence synthesis of the literature found that “quality papers in this area of research are very limited.” All three professions, physiotherapy, chiropractic and medical practitioners failed to attain satisfactorily high guideline adherence for evidence-based practice. Chiropractors have “the highest levels of guideline adherence, and chiropractors and physiotherapists are both significantly more guideline concordant than medical practitioners with respect to management of acute and subacute low back pain.”³

Spinal manipulative therapy (SMT) for chronic low back pain (LBP) in adults

A 2011 Cochrane review finds no clinically important differences between SMT and other treatments for pain and functional improvement for chronic LBP.⁴

Expert consensus recommends the following dosages for chronic spine-related pain:
2-3 visits/week for 2-4 weeks.

Mild exacerbation: 1-6 visits; scheduled ongoing care 1-4 visits/month.^{5,6}

A 2014 review of Physiotherapist-delivered group education and exercise interventions and self-management for people with osteoarthritis (OA) and chronic low back pain (CLBP), found group-based physiotherapy-led self-management interventions (GPSMI) for people with OA or CLBP is no more beneficial than individual physiotherapy or usual general practitioner care/medical management – both are equally comparable in clinical effectiveness.⁷

Report of the National Institutes of Health (NIH) Task Force on research standards for chronic low back pain

In 2014, the research task force (RTF) concluded that “at the current state of scientific evidence on chronic low back pain (cLBP), it is not realistic to create operationally defined research diagnostic criteria for subsets of cLBP.” This is due to the multifactorial nature of cLBP.⁸ This article proposes a recommended definition of cLBP and encourages classification in terms of its impact and any presumed pathoanatomic diagnosis.⁸ The RTF recommends a “uniform minimal data set, with recommendations for medical history, physical examination, diagnostic tests and self-report measures of physical function, depression, and sleep disturbance, in addition to pain intensity and interference.”⁸

Continued on next page.

Spine Related Pain continued

Spinal manipulative therapy (SMT) for neck pain in adults

A 2014 evidence-based guideline made strong recommendations for manipulation, manual therapy, and exercise combined with other modalities for chronic neck pain. It made moderate recommendations for manipulation and mobilization combined with other modalities for acute neck pain. Recommendations were weak for exercise alone for acute neck pain and manipulation alone for chronic neck pain. Thoracic manipulation and trigger point therapy were not recommended for acute neck pain. Transcutaneous nerve stimulation, thoracic manipulation, laser, and traction were not recommended for chronic neck pain.⁹

A 2013 evidence-based guideline from the Italian Society of Physical and Rehabilitation Medicine recommended, for non-specific acute neck pain, NSAIDs, manipulation, massage, physical therapy, acupuncture or anesthetic blocks. For persistent non-specific neck pain it recommended exercises (especially strengthening and stabilizing), manipulation and mobilization. Ultrasound, TENS, laser and acupuncture may be combined to optimize pain relief.¹⁰

Concerning whiplash-associated disorders (WAD): a 2014 systematic review suggests:

- “There is a role for multimodal care in the management of patients with NAD and WAD.
- Multimodal program may include manual therapy, education, and exercise

Relationship of intensity of multimodal care to outcomes:

Pts with recent WAD and NAD - >6 visits per 8 weeks do not report better outcomes than those who receive fewer treatments.

“Association between type and intensity of care was strongest during the first 6 months postcollision”.¹¹

According to a 2014 systematic review of the literature, “most patients with symptomatic cervical spine disc herniation with radiculopathy recover.” The course of symptomatic cervical disc herniation with radiculopathy is comparable with neck pain the general population (recurrent, and may be persistent and/or progressive).¹² “Quality of the literature regarding prognostic factors of symptomatic cervical disc herniations with radiculopathy is poor.”¹²

Interventions to improve walking ability in neurogenic claudication with lumbar spinal stenosis

A 2014 systematic review, found that no firm conclusions could be drawn due to current evidence of low and very low quality in regard to the effectiveness of surgical or non-surgical treatments to improve walking ability in patients with neurogenic claudication.¹³ It was also noted that physical therapy has not been shown to be clinically effective in the current evidence. “Supervised exercise improved walking ability but was found to be no better than no treatment or other combined treatments.”¹³

Continued on next page.

Spine Related Pain continued

References

1. Bronfort G, Haas M, Evans R, Leiniger B, Triano J. [Effectiveness of manual therapies: the UK evidence report](#). *Chiropr Osteopat*. Feb 25 2010;18(1):3. **FREE FULL TEXT**
2. 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**
3. Amorin-Woods LG, Beck RW, Parkin-Smith GF, Loughheed J, Bremner AP. [Adherence to clinical practice guidelines among three primary contact professions: a best evidence synthesis of the literature for the management of acute and subacute low back pain](#). *J Can Chiropr Assoc*. Sep 2014;58(3):220-237. **FREE FULL TEXT**
4. Rubinstein SM, van Middelkoop M, Assendelft WJ, de Boer MR, van Tulder MW. [Spinal manipulative therapy for chronic low-back pain](#). *Cochrane Database Syst Rev*. 2011(2):Cd008112.
5. Farabaugh RJ, Dehen MD, Hawk C. [Management of chronic spine-related conditions: consensus recommendations of a multidisciplinary panel](#). *J Manipulative Physiol Ther*. Sep 2010;33(7):484-492.
6. 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**
7. Toomey E, Currie-Murphy L, Matthews J, Hurley DA. [The effectiveness of physiotherapist-delivered group education and exercise interventions to promote self-management for people with osteoarthritis and chronic low back pain: A rapid review Part I](#). *Manual therapy*. Nov 1 2014.
8. Deyo RA, Dworkin SF, Amtmann D, et al. [Report of the National Institutes of Health task force on research standards for chronic low back pain](#). *J Manipulative Physiol Ther*. Sep 2014;37(7):449-467.
9. Bryans R, Decina P, Descarreaux M, et al. [Evidence-based guidelines for the chiropractic treatment of adults with neck pain](#). *J Manipulative Physiol Ther*. Jan 2014;37(1):42-63.
10. Monticone M, Iovine R, de Sena G, et al. [The Italian Society of Physical and Rehabilitation Medicine \(SIMFER\) recommendations for neck pain](#). *G Ital Med Lav Ergon*. 2013 Jan-Mar;35(1):36-50.
11. Sutton DA, Cote P, Wong JJ, et al. [Is multimodal care effective for the management of patients with whiplash-associated disorders or neck pain and associated disorders? A systematic review by the Ontario Protocol for Traffic Injury Management \(OPTiMa\) Collaboration](#). *Spine J*. Jul 8 2014.
12. Wong JJ, Cote P, Quesnele JJ, Stern PJ, Mior SA. [The course and prognostic factors of symptomatic cervical disc herniation with radiculopathy: a systematic review of the literature](#). *Spine J*. Aug 1 2014;14(8):1781-1789.
13. Ammendolia C, Stuber K, Tomkins-Lane C, et al. [What interventions improve walking ability in neurogenic claudication with lumbar spinal stenosis? A systematic review](#). *Eur Spine J*. Jun 2014;23(6):1282-1301.