Q/Does spinal manipulation relieve back pain?

Evidence-based answers from the Family Physicians Inquiries Network

ONLINE EXCLUSIVE

Evidence summary
Low back pain, defined as pain between the thoracic cage and proximal thighs, is the fifth most common reason for physician visits in the United States. The pain can be characterized by its duration: acute, <4 weeks; subacute, >4 weeks but <3 months; and chronic, >3 months.

Pharmacologic treatments for low back pain include nonsteroidal anti-inflammatory agents, opioids, and muscle relaxants. Non-pharmacologic options comprise exercise, physical therapy, massage, acupuncture, and yoga. Self-care includes handouts, books, heat, cognitive-behavioral therapy, and interdisciplinary rehabilitation. Traction, corsets, bed rest, home care, and diathermy are considered harmful.

How SMT compares with other treatments
A 2004 Cochrane meta-analysis of 39 RCTs with a total of 5486 patients concluded that SMT was superior to placebo and as effective as all other treatments in reducing low back pain. SMT wasn’t more helpful than other forms of treatment. Neither the professional training of the SMT provider nor the patient’s level of radiating pain was associated with better outcomes.

Complications from SMT are rare
The American Pain Society (APS) and the American College of Physicians (ACP) recently published a comprehensive review of RCTs published from 2000 to 2006 that examined nonpharmacologic treatments for low back pain. They evaluated 69 trials in 10 systematic reviews of the efficacy of SMT. Five high-quality reviews reached conclusions consistent with those of previous reviews. Complications from SMT are rare.

A/YES, spinal manipulation therapy (SMT) reduces lower back pain and improves the ability to perform everyday activities more than sham therapies (strength of recommendation [SOR]: A, multiple randomized controlled trials [RCTs] and systematic reviews), but it’s no more or less effective than pain medication, physical therapy, exercise, back school, or care given by a general practitioner (SOR: A, meta-analysis).

Insufficient evidence exists to conclude that the effectiveness of SMT varies with the presence or absence of radiating pain or the profession or training of the manipulator.

Spinal manipulation therapy works as well as, but no better than, other standard treatments for low back pain.

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The risk of a serious complication from spinal manipulation therapy is <1 per 1 million patient visits.

**Recommendations**

The APS and ACP guidelines recommend adding nonpharmacologic therapies such as SMT for acute, subacute, and chronic low back pain when patients don’t improve with self-care.  

**References**


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