

Physical therapy is effective for management of low-back pain

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A new review article published in the *Journal of the American Academy of Orthopaedic Surgeons* should help convince many patients with low back pain to consider physical therapy as a first line of treatment for their condition, according to the American Physical Therapy Association (APTA). The review, published in February 2009, recommends that in most cases of symptomatic lumbar degenerative disc disease, a common cause of low back pain (LBP), the most effective treatment is physical therapy combined with anti-inflammatory medications. Approximately 75 to 85 percent of adults will be affected by low back pain during their lifetimes.¹

Symptomatic lumbar degenerative disc disease develops when a disc weakens (often due to repetitive strain), is injured, or deteriorates from aging. As a result, the disc is unable to hold the vertebrae as it should and the lack of stability can cause back pain.

The review details the different treatment methods for symptomatic lumbar degenerative disc disease, including physical therapy with the use of nonsteroidal anti-inflammatory drugs (NSAIDs), and concludes that, in most patients with low back pain, symptoms resolve without surgical intervention. The review also concludes that physical therapy and nonsteroidal anti-inflammatory drugs are the "cornerstones" of non-surgical treatment.

Physical therapist intervention includes strengthening of core muscle groups, including the abdominal wall and lumbar musculature, which can

have positive effects in patients with this condition. According to APTA spokesperson Julie Fritz, PT, PhD, ATC, clinical outcomes research scientist at Salt Lake City's Intermountain Healthcare and associate professor at the University of Utah, physical therapists have several treatment options that can help patients with LBP whether due to degenerative disc disease or a variety of other causes.

Exercise and manual therapy including spinal manipulation, have been shown to benefit many patients.^{2,3} In addition, patient education to remain active and use appropriate body mechanics is beneficial. Physical therapists are trained to identify which of these treatment strategies will be most effective for an individual patient, which further improves the effectiveness of care.

In previous systematic reviews of the literature, it was found that exercise has been shown to improve function and decrease pain in adult patients with chronic LBP and that physical therapy was beneficial for the treatment of acute LBP.^{2,3} In another systematic review, NSAIDs were found to provide LBP patients with short-term symptomatic relief.⁴

"Receiving care from a licensed physical therapist can further improve the odds that a patient can maintain their quality of life and avoid surgery," said Fritz. In addition to building the core muscle groups, hands-on therapy to mobilize the spine has been shown to be particularly effective.^{5,6} "Spinal manipulation can be an important component of physical therapist treatment for low back pain. Supplementing exercise with spinal manipulation is also beneficial for many patients."

Physical therapists can help patients develop a safe and effective exercise program that is tailored to an individual's specific needs and goals. "Surgery should be the last option, but too often patients think of surgery as a cure all and are eager to embark on it," said Luke Madigan,

MD, an attending physician at Knoxville Orthopaedic Clinic, Knoxville, TN, and the lead author of the literature review.

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