

Nonsurgical Management of Acute and Chronic Low Back Pain

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Abstract

A variety of nonsurgical treatment alternatives exists for acute and chronic low back pain. Patients should receive appropriate education about the favorable natural history of low back pain, basic body mechanics, and methods (e.g., exercises, activity modification, behavioral modification) that can reduce symptoms. Nonprescription medication is efficacious for mild to moderate pain. Nonsteroidal anti-inflammatory drugs, alone or in combination with muscle relaxants, relieve pain and improve overall symptoms of acute low back pain. Exercise therapy has limited value for acute low back pain, but strong evidence supports exercise therapy in the management of chronic low back pain. Moderately strong evidence supports the use of manipulation in acute back pain. Evidence is weak for the use of epidural corticosteroid injections in patients with acute low back pain, strong for short-term relief of chronic low back pain, and limited for long-term relief of chronic low back pain. The use of facet injections in the management of acute low back pain is not supported by evidence, nor is the effectiveness of orthoses, traction, magnets, or acupuncture. Trigger point injections are not indicated for non-specific acute or chronic low back pain, and sacroiliac joint injections are not indicated in the routine management of low back pain. Conflicting evidence exists regarding the use of transcutaneous electrical nerve stimulation.

Low back pain is a common occurrence in the general population, affecting both sexes and all age groups, ethnic groups, and socioeconomic classes.^{1,2} Most patients recover quickly and without residual loss of function; however, recurrence is part of the natural history.¹⁻³ Furthermore, chronic symptoms develop in 5% to 10% of patients.² As a result, the cost to the individual and to society is enormous.

Treatment of low back pain is

challenging. A variety of therapeutic interventions is available, but no single modality appears to be superior, and evaluations vary depending on the cause of pain and on individual, social, and occupational factors.⁴⁻⁷ Scientific evidence supports the use of some nonsurgical treatment alternatives in patients with acute and chronic low back pain.

In reviewing these nonsurgical treatment alternatives, we present evidence-based information, how-

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