

The truth about treating low back pain

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Low back pain is a common, unrelenting concern for many patients and accounts for a high percentage of health care visits. Although low back pain has a generally favorable prognosis, some patients develop long-term debilitating symptoms that exacerbate or initiate psychiatric conditions. Chronic low back pain has been associated with depression¹ and rising rates of depression may contribute to the increasing prevalence of low back pain.^{2,3}

The recent Stepped Care for Affective Disorders and Musculoskeletal Pain (SCAMP) trial showed that optimization of antidepressants in conjunction with a self-management behavioral program reduced depressive and pain symptoms.⁴ Understanding current diagnostic and treatment recommendations for physical aspects of low back pain will allow psychiatrists to intervene more effectively in somatic and behavioral aspects of the disease and improve functional outcomes.

This article reviews American College of Physicians guidelines on diagnosing and treating low back pain. Most episodes of acute low back pain are self-limited and

do not require medical care, with symptom resolution and functional return occurring within the first month. However, 7.6% adult patients report at least 1 episode of severe acute low back pain over 1 year, and one-third of patients who have suffered an acute back pain episode report persistent, moderately intense symptoms and many suffer functional limitations.

Categorizing pain

Back pain can be grouped into 3 categories:

- non-specific low back pain
- back pain associated with radiculopathy or spinal stenosis
- back pain associated with another specific cause.

Low back pain frequently cannot be attributed to a specific disease or spinal abnormality, and conditions such as cancer,

Practice Points

- **Acute low back pain** generally has a favorable prognosis.
- Accurate categorizations of symptoms as well as **self-education and self-care options** are pillars of back pain treatment.
- **Reserve imaging** for patients with 'red flag' symptoms.
- **First-line pharmacotherapy** involves acetaminophen and nonsteroidal anti-inflammatory drugs.
- **Nonpharmacologic interventions** may be appropriate depending on the duration of symptoms.

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compression fracture, spinal stenosis, herniated disks, spinal infection, and ankylosing spondylitis comprise <10% of diagnosed causes of back pain.⁵ In the absence of “red flag” symptoms that may indicate more serious conditions (**Table 1**), there is no need to attribute low back pain symptoms to an anatomical source because often there is no associated improvement in outcomes.

When imaging is warranted

Although patients often request imaging as part of their workup, routine imaging or other diagnostic tests do not improve outcomes in patients with nonspecific back pain. When patients present with “red flag” symptoms or you suspect another underlying condition, imaging is warranted. MRI generally is preferred over CT. In patients with possible malignancy but no signs of spinal cord compression, multiple strategies have been proposed but not validated. First check plain radiography or erythrocyte sedimentation rate, followed by MRI if abnormalities are found. For patients with low back pain and signs of radiculopathy or spinal stenosis, MRI or CT is appropriate only if patients are candidates for surgery or epidural steroid injection, because symptoms tend to improve within 4 weeks with conservative, noninvasive management.

Selecting treatment

Education and counseling are essential when treating low back pain. Provide your patient with evidence-based information about low back pain, including self-care options such as support measures for pain relief (applying ice packs and heating or pads/blankets) and back-focused stretching and exercise programs (*see Related Resources, page 40*). Remaining as active as possible is more effective than prolonged (>1 to 2 days) bed rest in promoting return to function.⁶ Consider recommending self-care educational books such as *The back book*.⁷ The prognosis of acute low back pain with or without sciatica generally is favor-

Table 1

Back pain symptoms that may indicate a more serious condition

Progressive loss of motor or sensory function
Bilateral sciatica or leg weakness
Saddle anesthesia
Urinary or fecal incontinence
History of substantial trauma
Unrelenting pain at night or during rest
Unexplained weight loss
No improvement after 6 to 8 weeks of conservative therapy

able, and improvement is likely within the first month.⁸

Pharmacotherapy for low back pain is used in conjunction with—not in lieu of—back care education. However, there is a relative lack of long-term efficacy and safety. Acetaminophen or nonsteroidal anti-inflammatory drugs are typical first-line options.⁹ Other medications have moderate, mostly short-term benefits. Opioid analgesics or tramadol should be used occasionally and intermittently. When a patient does not respond to a time-limited opioid trial, reassess the symptoms and consider alternate therapies. Muscle relaxants such as cyclobenzaprine offer short-term relief but are associated with CNS side effects, most commonly drowsiness and dizziness but also fatigue, somnolence, confusion, and irritability. Tricyclic antidepressants are options to relieve chronic low back pain.¹⁰

Multiple nonpharmacologic therapies have small-to-moderate benefits for low back pain (**Table 2, page 40**). In acute low back pain (<4 weeks), spinal manipulation often is useful. Subacute low back pain (4 to 8 weeks) may improve with intensive interdisciplinary rehabilitation, including cognitive-behavioral therapy (CBT), and can increase functional status and reduce work absenteeism. For chronic low back pain, CBT or progressive relaxation, spinal manipulation, acupuncture, and other modalities have mild to moderate effectiveness.

continued

Clinical Point

Some patients develop long-term debilitating symptoms that exacerbate or initiate psychiatric conditions

Table 2

Nonpharmacologic modalities for low back pain

Duration of back pain	Treatment modality
Acute (<4 weeks)	Spinal manipulation
Subacute (4 to 8 weeks)	Intensive interdisciplinary rehabilitation (physician consultation, psychological and physical therapy, social and vocational intervention, cognitive-behavioral therapy [CBT])
Chronic (>8 weeks)	Acupuncture, exercise, massage therapy, yoga, CBT, progressive relaxation, spinal manipulation, intensive interdisciplinary rehabilitation

Source: Reference 5

Clinical Point

Cognitive-behavioral therapy may improve subacute or chronic low back pain

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Related Resources

- Last AR, Hulbert K. Chronic low back pain: evaluation and management. *Am Fam Physician.* 2009;79(12):1067-1074.
- Exercise for a better back. www.backcare.org.uk/CMS/files/702-exercise-for-a-better-back.pdf. Accessed April 12, 2010.

Drug Brand Names

Cyclobenzaprine • Flexeril
Tramadol • Ultram, Ultram ER

Disclosure

The authors report no financial relationship with any company whose products are mentioned in this article or with manufacturers of competing products.

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