

# Back Pain in Adults

Jonathan A. Becker, MD<sup>a,b,\*</sup>, Jessica R. Stumbo, MD<sup>a,b,c</sup>

## KEYWORDS

- Back pain • Lumbar spine • Disk herniation • Imaging • Therapeutics
- Pharmacotherapy

## KEY POINTS

- Back pain is common with most experiencing full relief of symptoms with minimal intervention within 4 to 6 weeks.
- The initial patient history and examination should focus on identifying any “red flags” that lead the clinician to suspect more severe pathology, such as cancer, infection, fracture, or cauda equina syndrome.
- For most patients, there is no indication for imaging of the lumbar spine and obtaining early studies does not improve outcomes.
- Radiographs are the initial imaging modality of choice, but rarely yield a definitive diagnosis.
- In nearly all complicated cases of back pain, MRI is the most useful imaging modality.
- NSAIDs are commonly used as a first-line therapy for back pain, but carry significant gastrointestinal, renal, and cardiovascular side effects.
- Despite their frequent use for more severe cases of back pain, there is only variable evidence regarding the effectiveness of opioids and systemic corticosteroids.
- Physical therapy is recommended when pain persists for more than 2 to 3 weeks. There is no standard protocol and the evidence supporting specific modalities is limited.
- Epidural steroid injections have been shown to provide a moderate short-term benefit for those with back and leg pain.
- Back surgery is indicated for the minority of patients, but provides the greatest benefit for those with sciatica, pseudoclaudication, or spondylolisthesis.

## INTRODUCTION AND EPIDEMIOLOGY

Low back pain is a common problem accounting for a staggering use of the health care system with direct and indirect costs exceeding \$100 billion per year in the United States.<sup>1</sup> To illustrate, low back pain is the second most common reason for a physician visit, it accounts for 2% to 3% of all physician visits, and 25% of all adults in the United States report at least 1 day of pain over a 3-month period.

---

Disclosures: None.

<sup>a</sup> Primary Care Sports Medicine Fellowship, Jewish Hospital and University of Louisville, Louisville, KY, USA; <sup>b</sup> Department of Family and Geriatric Medicine, University of Louisville, Louisville, KY, USA; <sup>c</sup> Centers for Primary Care, 215 Central Avenue, Suite 205, Louisville, KY 40208, USA

\* Corresponding author. Department of Family and Geriatric Medicine, 201 Abraham Flexner Way, Suite 690, Louisville, KY 40202.

E-mail address: [jon.becker@louisville.edu](mailto:jon.becker@louisville.edu)

Prim Care Clin Office Pract 40 (2013) 271–288

<http://dx.doi.org/10.1016/j.pop.2013.02.002>

[primarycare.theclinics.com](http://primarycare.theclinics.com)

0095-4543/13/\$ – see front matter © 2013 Elsevier Inc. All rights reserved.

For most, this is a self-limited condition with 90% experiencing full relief of symptoms with minimal intervention.<sup>2</sup> However, nearly one-third experience pain in excess of 6 months<sup>3</sup> and one-fourth experience a recurrence within 1 year.<sup>1</sup> The prevalence of low back pain has been increasing since 1990 with patients more likely to seek care, require multiple visits, and report chronic pain. Those with chronic pain are more likely to become less physically active and report higher levels of disability.<sup>4</sup>

As in the general population, low back pain is common in athletes. Although overall prevalence is unknown, published rates in competitive athletes range from 1% to 30%.<sup>5</sup> In young and healthy populations, participation in sports seems to be a risk factor for back pain with athletes having a higher incidence compared with those who are sedentary. However, in former elite athletes, there seems to be a lower lifelong incidence.<sup>5,6</sup>

There are specific activities that carry a higher prevalence of low back pain, especially those that involve repetitive hyperextension, such as gymnastics, diving, volleyball, golf, or football (offensive line). Throwing athletes, such as quarterbacks and pitchers, also seem to be at higher risk for back issues. Most of these cases are self-limited and do not cause any alteration in activity. However, low back pain is the most common reason for lost time in a competitive athlete.<sup>5,6</sup>

## HISTORY

Regardless of the level of activity of the patient, the history should focus on identifying any “red flags” for a severe pathology. Low back pain is such a common problem that an accurate history may be the only reliable way to determine if the patient’s pain is from a benign cause rather than one necessitating rapid diagnosis and treatment. These causes include cancer, cauda equina syndrome, infection, and fracture. A patient’s low back pain is not attributable to a spinal abnormality or disease state in 85% of cases so a rigorous work-up is not indicated unless there are clues in the history or physical examination. Even in the presence of a “red flag,” only a minority of patients have significant pathology.<sup>3,6-8</sup>

The evaluation of all patients presenting with low back pain starts with a detailed history. At the minimum, it should include the onset, duration, location, and frequency of the pain. Attention should be paid to any clues of a neurologic deficit, radicular pain, spinal stenosis, or an inflammatory condition. Any history of a back injury, use of prior treatments, and their efficacy is also important to review. Perhaps more than in other conditions, a thorough psychosocial history should be taken with emphasis on substance abuse, injury litigation, workmen’s compensation, job dissatisfaction, or psychiatric issues.

The history is crucial to finding any underlying “red flags” for more severe processes, such as cancer, vertebral fracture, cauda equina syndrome, or infection. The following should yield concern for neoplasm: any prior history of cancer or metastases; pain unrelieved by rest or when supine; systemic symptoms, such as fever, night sweats, or weight loss; advanced age (>50 years old); and greater than 6 weeks of pain. Those with a history of trauma, osteoporosis (or anything that affects bone health), substance abuse, long-term corticosteroid use, and the elderly are at higher risk for a vertebral fracture. Cauda equina syndrome should be considered if there are bowel or bladder symptoms; sudden onset of pain; or any progressive loss of neurologic function, such as loss of sensation or weakness. Spinal infection may present in the setting of prior lumbar surgery; unrelenting pain not relieved with rest; fever; immunosuppression; long-term corticosteroid use; intravenous drug use; or recent infection (eg, urinary tract, tuberculosis).

Other clues in the history may prompt further investigation for specific causes. The combination of back and leg pain, symptoms worse with sitting, the presence of

Download English Version:

<https://daneshyari.com/en/article/3825503>

Download Persian Version:

<https://daneshyari.com/article/3825503>

[Daneshyari.com](https://daneshyari.com)