

Epidural steroid injections for back pain

Consumer Reports

People with lower-back pain have several options for potential relief, including spinal manipulation, massage, medication, surgery, and simply letting time pass. But steroid injections are an increasingly popular option for lower-back pain—even though the Food and Drug Administration has not approved them for this use.

Controversy surrounds these injections, and use has increased dramatically in recent years, along with escalating costs. The injections have been an option for those with lower-back pain that also travels down the buttock or leg, often referred to as nerve-root pain or sciatica. Some experts believe that their growth reflects—in part—the rising prevalence of lower-back pain. But others suspect it's driven by financial incentives. Our analysis of the evidence, based on a recent report by the American Society of Health-System Pharmacists and several published reviews and treatment guidelines, suggests that while the shots might have limited value by providing short-term relief to some people, in most cases people should try other measures first.

What's the evidence?

Several conditions can put pressure on the nerves that go from the base of your spine to the sciatic nerve that runs down each leg. That pressure can inflame and irritate the nerve, causing pain—often with numbness and tingling—known as "radicular pain." Those conditions include a herniated disk, arthritis, diabetes, and degenerative changes in which the spine grows bony bumps.

Steroids injected into the spine—typically in an area called the epidural space, between the vertebrae and the protective covering of the spinal cord—can temporarily reduce inflammation around the irritated nerve.

But three professional organizations—the American Pain Society, the American Society of Interventional Pain Physicians, and the American Academy of Neurology—recently reached the same basic conclusion. While some evidence suggests that the shots can ease lower-back pain caused by nerve problems in the short-term, they're not going to provide long-term benefits. The neurology group, for example, concluded that treatment had no impact on functional impairment, the need for surgery, or pain relief beyond three months.

And a Cochrane review of studies focused only on back pain (not radiating to the leg) concluded that there was insufficient evidence to support the use of any type of injection therapy for pain that is only in the lower back.

"They can be overused," says Charles E. Argoff, M.D., a professor of neurology at Albany Medical College and director of the Comprehensive Pain Program at the Albany Medical Center. "This is especially true when they are performed on people who have pain only in their lower back or another type of pain that will not likely be helped by an epidural steroid injection. But a properly selected patient—for example, one who has nerve-root irritation based on physical examination and testing—may attain approximately 4 to 6 weeks of relief on average. That's often enough to get that person into an exercise program and jump-start the healing process."

Moreover, while steroid injections are generally safe they can pose some rare risks, including elevated blood sugar, fluid retention, weight gain, hypertension, osteoporosis, menstrual irregularity, suppression of the body's stress system, and a hormonal disorder known as Cushing's syndrome. (But these are fairly unlikely at the doses used for this procedure.)

Risks from the injection itself include such complications as meningitis, inflammation of the lining of the spinal cord, damage to the spinal cord, nerve injury, and paralysis. Another rare but serious risk is an epidural abscess, which can cause incontinence, urinary retention, fever, and back pain. And the shots can cause several minor (and short-lived) side effects, including headaches, dizziness, facial flushing, increased back or leg pain, nausea, vomiting, and pain at the injection site.