Steroid Injections to Treat Back Pain

Live long enough, and eventually you will have back pain. There are several major causes of back pain: muscle strain; fractures, tumors, or infections of the spine; and arthritis. Spinal stenosis occurs when the spinal canal is too narrow. A herniated disk occurs when the disk that cushions the space between spinal bones pushes against nerves. This causes a condition called lumbar radiculopathy (sciatica).

**TREATMENT: EPIDURAL INJECTIONS**

Most of the time, back pain can be treated with pain medications, muscle relaxants, warm compresses, and stretching exercises. When a disk pushes on a nerve, causing pain, interventions to treat the bulging disk can be effective. Surgery may be helpful when pain, discomfort, and neurologic deficits are initially severe and debilitating. Surgery is also beneficial when the pain increases in severity with time. Back injections with steroids and medications that numb nerves may provide short-term pain relief when a nerve is compressed.

The epidural space exists between the covering of spine (the dura) and the bones of the spinal canal. Accessing these spaces with a needle (see JAMA Patient Page on Lumbar Puncture, October 26, 2006) enables clinicians to inject medications into this space to help reduce pain. Sometimes, local anesthetic drugs like the kind used to numb teeth at the dentist are used. These medications numb the spinal nerves. Steroids are sometimes injected because these medications reduce swelling, providing some pain relief.

Injections of steroids into the spine for pain relief should be done only when there is nerve-related pain, not when back pain is present alone. Pain relief is short, lasting only a few weeks. These injections are not intended to replace other, permanent solutions to nerve compression such as surgery. Patients should not have more than about 3 injections in the course of a year. Beyond the first few injections, no further benefit from these injections is likely.

You should not have these injections if you have a congenital back problem, have had back surgery, have a bleeding problem or take blood thinners, or have an infection on the site where the injection would be performed. If you have diabetes, severe congestive heart failure, poorly controlled hypertension, or a serious infection, steroids should not be administered.

**FUNGAL MENINGITIS**

Recently, a large number of patients developed very unusual infections (meningitis and/or spinal abscesses) linked to fungal contamination of steroids used in back injections. These steroids were packaged at a company called a compounding pharmacy, not a drug manufacturer. Drug manufacturers are regulated by the US Food and Drug Administration, whereas compounding pharmacies are not. Before receiving any injection, ask your practitioner where the drugs came from and ensure that they came directly from a known manufacturer and the vial of medication is used exclusively for you.

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For your information:

- American Academy of Neurology patients.aan.com/disorders/index.cfm?event=view&disorder_id=860
- Centers for Disease Control and Prevention www.cdc.gov/HAI/outbreaks/meningitis.html
- JAMA jama.jamanetwork.com/SS/fungal_meningitis_outbreak.aspx

Inform yourself: To find this and previous JAMA Patient Pages, go to the Patient Page link on JAMA’s website at www.jama.com. Many are available in English and Spanish.