

# EPIDURAL INJECTIONS

## What is an epidural injection?

Your doctor may have suggested you have an *epidural injection*. This procedure can help relieve low back and leg pain by reducing *inflammation* (swelling and irritation). Sometimes it can resolve the problem so surgery is not necessary. An injection also can help your doctor diagnose the source of your pain by numbing certain areas of your back. Where you are injected depends on the goal of the injection.

The term, epidural, refers to the space outside the *dura* or covering of the spinal cord but inside the *spinal canal*. This space runs the length of the spinal cord. This procedure is performed under fluoroscopy (a type of x-ray) guidance so the doctor can better target the direct source of your pain.

## A Way to Relieve Pain

An epidural injection does not stop all low back and leg pain; but, it can reduce pain and break the pain cycle. Pain can make it hard to move or be active. Since lack of movement can then slow down healing, an epidural block(s) can often help speed recovery so you can be more active. Some people may feel more relief from an injection than others. And some people may need more than one injection to get relief. Often we recommend a series of three (3).

## A Tool for Diagnosis

An injection can help locate the source of pain. Also called a *selective nerve block* or a *selective epidural*, it numbs the roots of specific nerves. The effect lasts only a short time. However, if you feel relief, it can identify the source of the pain. If you feel no relief, it may mean that the pain's source is at another level in your spine. It also can mean that something other than inflammation is causing the pain. Injection results also may be used to help plan back surgery, if needed.

## What are Steroids?

Steroids are a type of chemical found naturally in your body. Steroids used for medical purposes are potent anti-inflammatory agents and can be useful in the treatment of patients with arthritis, spinal stenosis or radiculopathy (a problem where one or more nerves are affected, do not work properly and cause pain,

weakness, numbness or difficulty controlling specific muscles). In radiculopathy, the problem is at or near the root of the nerve, along the spine and the symptoms can be referred into a leg or an arm. Steroids can be effective when the radiculopathy is caused by local inflammation due to disc injury, degenerative changes or other causes.

Most adverse effects of steroids are related to long-term use. When steroids are used by local means such as an injection, the associated risks are substantially reduced. Side effects can include indigestion, increased appetite, trouble sleeping and occasional headache.

## What Causes the Inflammation Associated with My Symptoms?

Inflammation or irritation is a by-product of a nerve root is most commonly caused from a disc herniation, a degenerated disc or a "leaky" disc at the spinal nerve root level.

## Your Injection Procedure

An epidural injection is usually an outpatient procedure. It's often done in a hospital or an outpatient surgery center. You may receive light conscious sedation which is medication given intravenously (IV) to help you relax during the procedure. If sedation is necessary, you will be closely monitored with an EKG, blood pressure cuff and blood oxygen monitoring device. Local anesthetic is used before the actual injection to diminish discomfort. Under fluoroscopy, the doctor then locates a specific anatomical target site or location that is near the problem area. Contrast is used to confirm proper placement and medication, typically anesthetic or steroid, is then injected. Although you will be in the surgery center for about an hour, the actual procedure time is about 15 minutes.

## Is the Procedure Painful?

The procedure does involve an injection so you may feel some discomfort. Since local anesthetic is used as well as intravenous medication, we will make you as comfortable as possible. You may feel a sense of warmth as the fluid is injected and you may experience some of your typical pain. Your doctor will be

interested in how this feels compared to your usual symptoms.

#### When Will I Feel Some Pain Relief?

For up to 6 hours after an injection, you may experience numbness and/or relief from your usual pain due to the long-acting anesthetic injected. Your usual pain symptoms may then return and even become worse than usual for a day or two. The beneficial effects of the steroid injection usually begin in 2 or 3 days but could take as long as a week.

#### How Many Injections Will I Need?

It is hard to say. If an initial injection provided an adequate amount of relief, a second one could provide more benefit. If your pain subsides completely but later returns, additional injections are possible.

#### Are There Risks?

Generally, this procedure is very safe. However, with any procedure, there are risks and possible side effects and complications. The most common side effect is pain, which is temporary. Sometimes there is occasional bruising. There is a rare chance of infection, either at the injection site or in the deeper tissue which would require antibiotics by mouth or intravenously. If the infection were severe, it could require hospitalization and possible surgery.

During this procedure, it is possible to get close to a nerve root. This could cause a slight increase in pain with possible radiation into the extremity. It is very unlikely but there could be permanent nerve damage.

Very rare complications include bone injury from repetitive steroid intake, reaction to the injection material (anesthetic or steroid) causing cardiac compromise or seizures. Death is even a possibility as with any invasive procedure although this possibility is exceedingly rare.

#### When You Return Home

You don't need to stay in bed when you get home. In fact, it is best to walk around if you feel up to it. Just be careful about being too active. Even if you feel better right away, avoid activities that may strain your back. Keep in mind that some patients may feel increased pain at first. It usually goes away within a few days. You should not drink alcohol this day.

#### The First Few Days

As mentioned above, an injection to reduce inflammation takes a few days to work. There may

even be more pain at first. An injection to help locate the source of pain may give only brief pain relief. Later, you'll feel the same as you did before the injection. Follow up on treatment with your doctor. Whether you were injected for pain relief or diagnosis, these tips will help you to recover:

- Increase your activity about 25% per day so your activity level is at 100% at the end of about four (4) days.
- Take walks when you feel up to it.
- Rest if needed, but get up and move around after sitting for half an hour.
- Don't exercise vigorously.
- Don't drive the day of the procedure or until your doctor says it's OK.
- Return to work or other activities when your doctor says you're ready.

#### When to Call Your Doctor

Call right away if you notice any of the following symptoms:

- ✓ Severe pain or headache
- ✓ Fever or chills
- ✓ Loss of bladder or bowel control
- ✓ Redness or swelling around the injection site

#### The Road to a Healthier Back

Whether your injection was for relieving pain or locating pain, you can take steps toward a healthier back. Talk to your doctor. Learn the best way to treat your pain. If it worsens, let your doctor know. But often, your back health is under your control. Exercise and good body mechanics help. Other choices in your life also can make a difference.

#### Choosing a Healthy Back

Make the lifestyle choices below can play a role in maintaining back health.

- **Quit smoking.** Nonsmokers are less likely than smokers to have back pain.
- **Eat healthy.** A low-fat, high-fiber diet can help control weight and improve back health.
- **Manage stress.** Keeping stress in check can ease and may prevent back pain.
- **Stay active.** Walking and other types of physical activity can help reduce pain and increase flexibility and strength. □