

**National Institutes of Health / U.S. National Library of Medicine**



[Home](#) → [Medical Encyclopedia](#) → Epidural injections for back pain

URL of this page: //medlineplus.gov/ency/article/007485.htm

## Epidural injections for back pain

An epidural steroid injection (ESI) is the delivery of powerful anti-inflammatory medicine directly into the space outside of the sac of fluid around your spinal cord. This area is called the epidural space.

ESI is not the same as epidural anesthesia given just before childbirth or certain types of surgery.

### Description

ESI is done in a hospital or outpatient clinic. The procedure is done in the following way:

- You change into a gown.
- You then lie face down on an x-ray table with a pillow under your stomach. If this position causes pain, you either sit up or lie on your side in a curled position.
- The health care provider cleans the area of your back where the needle will be inserted. Medicine may be used to numb the area. You may be given medicine to help you relax.
- The doctor inserts a needle into your back. The doctor likely uses an x-ray machine that produces real-time images to help guide the needle to the correct spot in your lower back.
- A mixture of steroid and numbing medicines are injected into the area. This medicine decreases swelling and pressure on the larger nerves around your spine and helps relieve pain.
- You may feel some pressure during the injection. Most of the time, the procedure is not painful. It is important not to move during the procedure because the injection needs to be very precise.
- You are watched for 15 to 20 minutes after the injection before going home.

### Why the Procedure is Performed

Your doctor may recommend ESI if you have pain that spreads from the lower spine to the hips or down the leg. This pain is caused by pressure on a nerve as it leaves the spine, most often due to a bulging disc.

ESI is used only when your pain has not improved with medicines, physical therapy, or other nonsurgical treatments.

## Risks

ESI is generally safe. Complications may include:

- Dizziness, headache, or feeling sick to your stomach. Most of the time these are mild.
- Nerve root damage with increased pain down your leg
- Infection in or around your spine (meningitis or abscess)
- Allergic reaction to the medicine used
- Bleeding around the spinal column (hematoma)
- Possible rare brain and nervous system problems

Talk to your doctor about your risk of complications.

Having these injections too often may weaken the bones of your spine or nearby muscles. Receiving higher doses of the steroids in the injections may also cause these problems. Because of this, most doctors limit patients to two or three injections per year.

Your doctor will most likely have ordered an MRI scan of the back before this procedure. This helps your doctor determine the area to be treated.

## Before the Procedure

Tell your doctor or nurse:

- If you are pregnant or might be pregnant
- What medicines you are taking, including herbs, supplements, and other drugs you bought without a prescription

You may be told to stop taking medicines that make it hard for your blood to clot for several days before the test. This may include aspirin, ibuprofen (Advil, Motrin), clopidogrel (Plavix), warfarin (Coumadin), naproxen (Aleve, Naprosyn), and heparin.

## After the Procedure

You may feel some discomfort in the area where the needle was inserted. This should last only a few hours.

You may be told to rest for the rest of the day.

Your pain may become worse for 2 to 3 days after the injection before it begins to improve. The steroid usually takes 2 to 3 days to work.

If you receive medicines to make you sleepy during the procedure, you must arrange for someone to drive you home.

## Outlook (Prognosis)

ESI provides short-term pain relief in at least half of the people who receive it. Symptoms may remain better for weeks to months, but rarely up to a year.

The procedure does not cure the cause of your back pain. You will need to continue back exercises and other treatments.

## Alternative Names

ESI; Spinal injection for back pain; Back pain injection; Steroid injection - epidural; Steroid injection - back

## References

Chou R, Loeser JD, Owens DK, Rosenquist RW, et al. American Pain Society Low Back Pain Guideline Panel. Interventional therapies, surgery, and interdisciplinary rehabilitation for low back pain: an evidence-based clinical practice guideline from the American Pain Society. *Spine*. 2009;34(10):1066-77. PMID: 19363457  
[www.ncbi.nlm.nih.gov/pubmed/19363457](http://www.ncbi.nlm.nih.gov/pubmed/19363457) [<https://www.ncbi.nlm.nih.gov/pubmed/19363457>].

Dixit R. Low back pain. In: Firestein GS, Budd RC, Gabriel SE, et al, eds. *Kelly's Textbook of Rheumatology*. 9th ed. Philadelphia, PA: Elsevier Saunders; 2013:chap 47.

Henwood AM, Benzel EC. Nonoperative management of neck and back pain. In: Benzel EC, ed. *Spine Surgery*. 3rd ed. Philadelphia, PA: Elsevier Saunders; 2012:chap 189.

## Review Date 5/13/2015

Updated by: C. Benjamin Ma, MD, Professor, Chief, Sports Medicine and Shoulder Service, UCSF Department of Orthopaedic Surgery, San Francisco, CA. Also reviewed by David Zieve, MD, MHA, Isla Ogilvie, PhD, and the A.D.A.M. Editorial team.



A.D.A.M., Inc. is accredited by URAC, also known as the American Accreditation HealthCare Commission ([www.urac.org](http://www.urac.org)). URAC's [accreditation program](#) is an independent audit to verify that A.D.A.M. follows rigorous standards of quality and accountability. A.D.A.M. is among the first to achieve this important distinction for online health information and services. Learn more about A.D.A.M.'s [editorial policy](#), [editorial process](#) and [privacy policy](#). A.D.A.M. is also a founding member of Hi-Ethics and subscribes to the principles of the Health on the Net Foundation ([www.hon.ch](http://www.hon.ch)).

The information provided herein should not be used during any medical emergency or for the diagnosis or treatment of any medical condition. A licensed physician should be consulted for diagnosis and treatment of any and all medical conditions. Call 911 for all medical emergencies. Links to other sites are provided for information only -- they do not constitute endorsements of those other sites. Copyright 1997-2016, A.D.A.M., Inc. Duplication for commercial use must be authorized in writing by ADAM Health Solutions.



---

U.S. National Library of Medicine 8600 Rockville Pike, Bethesda, MD 20894  
U.S. Department of Health and Human Services National Institutes of Health

Page last updated: 05 October 2016