

SYSTEMATIC REVIEW:

Epidural steroids for cervical and lumbar radicular pain and spinal stenosis

Summary for patients and care partners

The American Academy of Neurology (AAN) assembled a panel of expert doctors and researchers to review studies of whether epidural steroid injections (ESIs) reduce pain and disability for people with certain kinds of chronic back pain. This summary reviews the conclusions of their research, which was published in *Neurology*® on February 12, 2025.

What is an epidural steroid injection (ESI)?

An ESI is a procedure where a doctor who is a specialist in the spine injects a steroid or corticosteroid medication into a part of your spine called the epidural space. The goal of an ESI is to help reduce certain kinds of back pain.

What kinds of pain are ESIs used for?

This review focused on the use of ESIs to reduce pain for people with radiculopathy and spinal stenosis. Radiculopathy is a condition caused by a pinched nerve in your spine. Spinal stenosis is a condition where your spinal cord or nerves have become irritated because the space around your spinal cord has become too small. Both of these conditions can cause chronic pain and disability in some people.

What does the research say?

For people with pain or disability from radiculopathy, studies show that ESIs can be effective at modestly reducing pain and disability for up to 3 months after the procedure. They may also reduce disability for up to 6 months or more in some people. Most studies looked at people with radiculopathy in their lower backs, so it's not clear how effective ESIs are for people with radiculopathy in their necks.

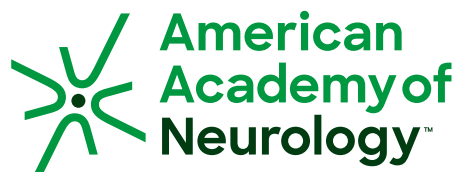
For people with pain or disability from spinal stenosis, studies show that ESIs might modestly reduce disability for up to 6 months or more after the procedure. But, ESIs do not usually reduce pain for people with spinal stenosis. All studies looked at people with stenosis in their lower backs, so researchers don't know how effective ESIs are for people with stenosis in their necks.

What should I ask my doctor?

- What condition is causing my back pain or disability?
- Is an ESI procedure an appropriate option for helping to reduce my pain or disability?
- What does the research say about how effective ESIs are for reducing pain or disability for people with my condition?

The full systematic review can be found at [AAN.com/guidelines](https://www.aan.com/guidelines).
To learn more about brain health, go to [BrainandLife.org](https://www.brainandlife.org).





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This statement is provided as an educational service of the AAN. It is based on an assessment of current scientific and clinical information. It is not intended to include all possible proper methods of care for a neurological problem or all legitimate criteria for choosing to use a specific procedure. It does not exclude any reasonable alternative methods. The AAN recognizes that specific patient care decisions are the right of the patient and the physician caring for the patient, based on all the circumstances involved.

The AAN develops these summaries as educational tools for neurologists, patients, family members, caregivers, and the public. You may save a single copy for your personal use. Please contact guidelines@aan.com to learn about other ways you can share this content beyond your personal use.

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