

# BACK PAIN

## RADICULOPATHY

### LOW BACK NERVE DAMAGE



### Introduction

The five vertebrae making up the low back (also known as the lumbar spine) are numbered L1 to L5. The low back supports most of a body's weight, so the vertebrae here are the largest of the spinal column.

The nerve roots that send signals to the body from the low back are responsible for controlling the legs, bowel and bladder functions. When these nerve roots are damaged (known as radiculopathy), symptoms are usually experienced in the back, buttocks, legs or feet.

### Causes of nerve damage in the lower back<sup>1,2</sup>

One of the main causes of nerve damage is disc herniation. This can happen for many reasons, including:

- "Wear and tear" due to age (known as disc degeneration)
- Overstrain due to heavy lifting, obesity or overweight
- Congenital disorder

Nerve damage in the low back may also result from:

- Injury or accident, such as a fall
- Bone spurs
- Narrowing of the spaces through which the nerves travel within our spine

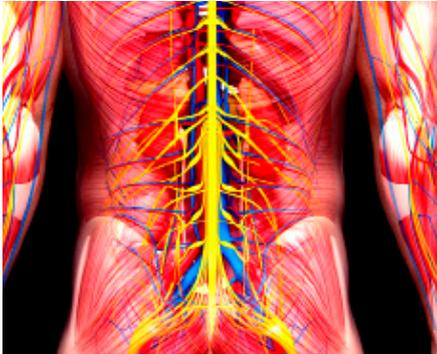
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## What are the symptoms of nerve damage in the low back?<sup>4</sup>

- Sciatica: pain radiating down the leg from the low back
- Pain, numbness, tingling or weakness in the buttocks, legs or feet
- No symptoms at all



## How is nerve damage diagnosed?

Diagnosing nerve damage usually begins with a physical examination performed by a doctor, followed by imaging tests.

In some cases, nerve conduction studies and testing known as electromyography may be ordered. These can rule out a neurological condition.<sup>1</sup>

## How is nerve damage treated?

Surgery is not usually needed to treat nerve damage or disc herniation.<sup>3</sup> In fact, 95% of individuals with disc herniation would not require surgery if treatment were commenced early on.<sup>4</sup> However, when other options do not provide relief, surgery can be considered.

When considering treatment, you should discuss all options with your doctor.

### Conservative treatment

Also known as “observation”, conservative treatment allows the body time to recover on its own. A program of rest and carefully planned exercises is followed during this time. Conservative treatment does not mean “doing nothing”. It means actively paying attention to the body and its progress.

### Cognitive Behavioral Therapy (CBT)

This type of therapy employs coping and pain management strategies through muscle tension control, stress reduction and changing of activity patterns.<sup>5</sup> One study found that individuals suffering from lower back pain who followed a CBT program scored higher on functional improvement questionnaires and had reported greater improvement in their pain than those who followed standard conservative treatment programs.<sup>6</sup>

### Physical therapy

Also known as manual therapy, physical therapy involves working with a professional physiotherapist to follow a rehabilitation and exercise program. Physical therapy can keep the body active and shorten recovery time. 1therapy can keep the body active and shorten recovery time.<sup>1</sup>

### Medication (NSAIDs)

This type of medication can be bought over the counter or prescribed by a doctor. Ibuprofen is an example of a common NSAID (non-steroidal anti-inflammatory drug). Each NSAID will have side effects and particular instructions which

need to be understood before they are used. It's important to talk to your doctor before beginning treatment with an NSAID.

## Medication (TFESIs)

If physical therapy and NSAIDs do not provide relief, TFESIs (transforaminal epidural steroid injections, or epidural corticosteroid injections) have been found to be as much as 80% effective for short-term pain relief. One to three injections are usually needed to provide relief, and there is a risk of stroke or spinal cord injury with this treatment.<sup>7</sup>

## Surgery

Everyone responds differently to surgery, and for lumbar nerve damage there are different types available, with the side effects and recovery experience varying from patient to patient. However, surgery is not usually recommended for anyone suffering from lumbar nerve damage for less than three months or for patients who smoke. While some studies show that surgery can provide effective short-term relief, it has not been proven to have lasting benefits in the long-term. It is important to understand that symptoms such as weakness and numbness may persist even right after surgery. Moreover, individuals who undergo surgery to treat sciatica tends to have more improvement in leg pain than back pain, with 70-75% of individuals finding significant improvement of leg pain after decompression surgery.<sup>9</sup>

## Questions about your diagnosis?

### Unsure which treatment is right for you?

Did you know you have access to a free, independent and confidential decision support service?

Discuss your concerns and have your case reviewed by a specialist in your condition.

The decision is yours. And we're with you all the way.



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