

# Herniated Disk

## What is a herniated disk?

Disks are small, circular cushions between vertebrae (the bones of the spine). Normally, disks act as shock absorbers to cushion your vertebrae from each other as you move. A herniated disk is a disk that has bulged out from its proper place. It may press on nearby nerves and cause severe pain.

## How does it occur?

When a disk is damaged, the soft rubbery center of the disk squeezes out through a weak point in the hard outer layer. A disk may be damaged by:

- a fall or accident
- repeated straining of your back
- a sudden strenuous action such as lifting a heavy weight or twisting violently.

A herniated disk may also happen spontaneously without any specific injury.

## What are the symptoms?

Symptoms of a herniated disk in your neck may begin suddenly or gradually. You may wake up and feel a sudden aching. Or you may have a twisted neck that you cannot straighten without extreme pain. You may also have numbness, tingling, or weakness in one or both arms.

If your herniated disk is below

your neck, your symptoms may develop gradually or begin suddenly. Symptoms include:

- back pain
- pain down one or both legs
- numbness, tingling, or weakness in one or both legs
- changes in bladder and bowel habits.

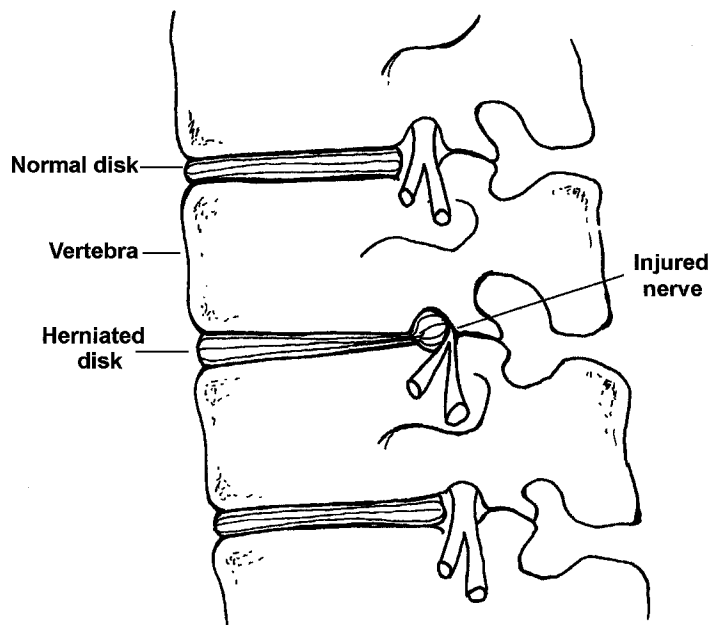
## How is it diagnosed?

Your health care provider will review your symptoms and ask about the history of your pain. Then he or she will examine your spine and test

the movement and reflexes in your arms and legs. Finally, your provider may want you to have one or more of the following tests:

- x-rays of your spine
- CT scan (computerized x-ray images of your spine)
- magnetic resonance imaging, also called MRI (an image of your spine and herniated disk generated by sound waves)
- electromyography (tests of electrical activity in your muscles)
- myelography (injection of dye into the fluid around the

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Side view of vertebra in spine

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spinal cord that can be seen on x-rays)

- diskography (injection of dye into a disk and x-rays taken).

### How is it treated?

In most cases, treatment without surgery will relieve your pain.

Treatment for a herniated disk in your neck may include:

- hot or cold packs
- anti-inflammatory drugs
- muscle relaxants
- prescription pain relievers
- a neck collar or neck brace to relieve muscle spasms
- neck and shoulder massage
- traction, which is the process of putting bones or muscles under tension with a system of weights and pulleys to keep them from moving or to relieve pressure on them.

For a herniated disk in your back, treatment may include:

- several days or more of lying flat on your back on a firm mattress or on an ordinary bed with a stiff board under the mattress, or lying on your belly with a pillow under your chest, whichever is more comfortable
- muscle relaxants
- anti-inflammatory drugs
- prescription pain relievers

- hot or cold packs, depending on your health care provider's preference
- traction
- back massage or physical therapy
- steroid injections into the space near the herniated disk to control pain and inflammation.

As your pain lessens, your health care provider will want you to begin a physical therapy program in which you will do exercises to strengthen your back muscles and joints. Recently, stabilizing exercises have been used successfully to treat herniated disks. This therapy involves learning how to control the movement of your spine in all recreation and work activities.

If you continue to have symptoms, you may need to have surgery. However, most people who have herniated disks do not need surgery.

### How long will the effects of a herniated disk last?

The initial intense pain should go away within a few weeks, but some pain may remain for a few months. You may be prone to backaches throughout your life and therefore must remember to protect your spine when lifting or being physically active.

If the weakness and numbness in your legs continue or if you

lose control of your bowel or bladder function, contact your health care provider immediately.

### How can I take care of myself?

Practice correct posture when you are walking, sitting, standing, lying down, or working.

- When lifting heavy objects, don't bend over from your waist. Kneel or squat down by the object, while keeping your back as straight as possible. Use your thigh muscles to do the lifting. Avoid twisting.
- When you stand, always stand up straight with your shoulders back, abdomen in, and the small of the back flat. When standing for long periods, move around frequently and shift your weight from one foot to another while standing as straight as possible.
- When you sit, have your feet flat on the floor or elevated. Get up every 20 minutes or so and stretch. Sit in a chair that has good back support.
- Sleep on a firm mattress or one with a bed board under it. Lie on your side (never on your stomach) with your knees bent or on your back with a small pillow under your head and another pillow under your knees.

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### ***When can I return to my sport or activity?***

The goal of rehabilitation is to return you to your sport or activity as soon as is safely possible. If you return too soon you may worsen your injury, which could lead to permanent damage. Everyone recovers from injury at a different rate. Return to your sport will be determined by how soon your herniated disk recovers, not by how many days or weeks it has been since your injury occurred. In general, the longer you have

symptoms before you start treatment, the longer it will take to get better.

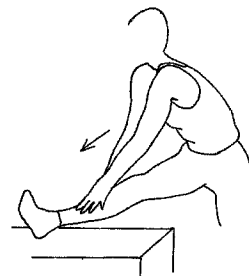
It is important that your herniated disk has fully recovered before you return to any strenuous activity and that you have been seen by your health care provider. You must be able to perform all of your rehabilitation exercises without pain. You must have full range of motion of your back and neck and have no shooting pain into your legs or arms. You must be able to run, jump, and twist without any pain.

### ***What can be done to help prevent a herniated disk?***

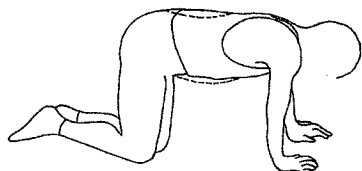
Herniated disks can often be prevented by keeping your weight down, eating a proper diet, and exercising to keep your muscles firm. Strong, flexible muscles can stabilize your spine and protect it from injury. This includes keeping your stomach muscles strong. Walking and swimming are two good exercises for strengthening and protecting your spine.

## Herniated Disk Rehabilitation Exercises

1. **Hamstring stretch:** Place the heel of your injured leg on a stool about 15 inches high. Lean forward, bending at the hips until you feel a mild stretch in the back of your thigh. Make sure you do not roll your shoulders and bend at the waist when doing this or you will stretch your lower back instead. Hold the stretch 30 to 60 seconds. Repeat 3 times.

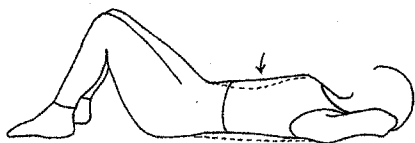


Hamstring stretch



Cat and camel

2. **Cat and camel:** Get down on your hands and knees. Let your stomach sag, allowing your back to curve downward. Hold this position for 5 seconds, then arch your back. Repeat 10 times. Do 2 sets.



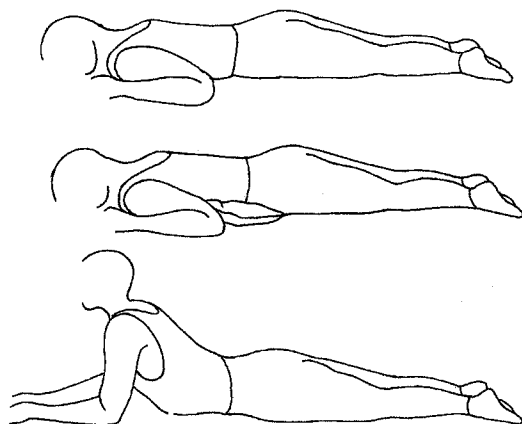
Pelvic tilt

3. **Pelvic tilt:** Lie on your back with your knees bent and your feet flat on the floor. Tighten your stomach muscles to flatten your lower back against the floor. Hold for 5 seconds, then relax. Repeat 10 times. Do 3 sets.

4. **Prone hip extension:** Lie on your stomach with your legs straight out behind you. Tighten your buttock muscles and lift your right leg off the floor, keeping your knee straight. Hold this position for 5 seconds. Then lower your leg and relax. Repeat the same with your left leg. Hold 5 seconds and then lower the leg and relax. Repeat 10 times on each side. Build up to 3 sets of 10.



Prone hip extension



Prone-lying exercises

5. **Prone-lying exercises:** Lie face down on the floor for 5 minutes. If this hurts too much, lie face down with a pillow under your stomach. This should relieve your leg pain. When you can lie on your stomach for 5 minutes without pillows, then you can move to the next step. Lie on your stomach and prop yourself up on your elbows for 10 seconds at a time. You should have no pain in your legs when you do this, but it is normal to feel pain in your lower back. Repeat 10 times and do this several times a day.

## **Herniated Disk Rehabilitation Exercises**

6. Partial curl: Do this exercise only when you no longer have pain in your buttocks or legs. Lie on your back with your knees bent and your feet flat on the floor. Tighten your stomach muscles and flatten your back against the floor. Tuck your chin to your chest. With your hands stretched out in front of you, curl your upper body forward until your shoulders clear the floor. Hold this position for 3 seconds. Don't hold your breath. It helps to breathe out as you lift your shoulders up. Relax. Repeat 10 times. Build to 3 sets of 10. To challenge yourself, clasp your hands behind your head and keep your elbows out to the side.



**Partial curl**

If you have a herniated disk, you should limit driving and other sitting activities to no more than 30 minutes at a time. Walking is also good exercise for you.