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Herniated Disk

A herniated (slipped) disk occurs when all or part of a disk is forced through a weakened part of the disk. This may place pressure on nearby nerves or the spinal cord.



Watch this video about:
Herniated nucleus pulposus (slipped disk)

Causes

The bones (vertebrae) of the spinal column protect nerves that come out of the brain and travel down your back to form the spinal cord. Nerve roots are large nerves that branch out from the spinal cord and leave your spinal column between each vertebrae.

The spinal bones are separated by disks. These disks cushion the spinal column and put space between your vertebrae. The disks allow movement between the vertebrae, which lets you bend and reach.

With herniated disk:

- The disk may move out of place (herniate) or break open (rupture) from injury or strain. When this happens, there may be pressure on the spinal nerves. This can lead to pain, numbness, or weakness.
- The lower back (lumbar area) of the spine is the most common area for a slipped disk. The neck (cervical) disks are sometimes affected. The upper-to-mid-back (thoracic) disks are rarely involved.

A herniated disk is one cause of radiculopathy. This is any disease that affects the spinal nerve roots.

Slipped disks occur more often in middle-aged and older men, usually after strenuous activity. Other risk factors include conditions present at birth (congenital) that affect the size of the lumbar spinal canal.

Symptoms

The pain most often occurs on one side of the body.

- With a slipped disk in your lower back, you may have sharp pain in one part of the leg, hip, or buttocks and numbness in other parts. You may also feel pain or numbness on the back of the calf or sole of the foot. The same leg may also feel weak.
- With a slipped disk in your neck, you may have pain when moving your neck, deep pain near or over the shoulder blade, or pain that moves to the upper arm, forearm, and fingers. You can also have numbness along your shoulder, elbow, forearm, and fingers.

The pain often starts slowly. It may get worse:

- After standing or sitting
- At night

- When sneezing, coughing, or laughing
- When bending backward or walking more than a few yards

You may also have weakness in certain muscles. Sometimes, you may not notice it until your doctor examines you. In other cases, you will notice that you have a hard time lifting your leg or arm, standing on your toes on one side, squeezing tightly with one of your hands, or other problems.

The pain, numbness, or weakness often goes away or improves a lot over weeks to months.

Exams and Tests

A careful physical exam and history is almost always the first step. Depending on where you have symptoms, your doctor examines your neck, shoulder, arms, and hands, or your lower back, hips, legs, and feet.

Your doctor will check:

- For numbness or loss of feeling
- Your muscle reflexes, which may be slower or missing
- Your muscle strength, which may be weaker
- Your posture, or the way your spine curves

Your doctor may also ask you to:

- Sit, stand, and walk. While you walk, your doctor may ask you to try walking on your toes and then your heels.
- Bend forward, backward, and sideways
- Move your neck forward, backward, and sideways
- Raise your shoulders, elbow, wrist, and hand and check your strength during these tasks

Leg pain that occurs when you sit down on an exam table and lift your leg straight up usually suggests a slipped disk in your lower back.

In another test, you will bend your head forward and to the sides while the health care provider puts slight downward pressure on the top of your head. Increased pain or numbness during this test is usually a sign of pressure on a nerve in your neck.

DIAGNOSTIC TESTS

- EMG may be done to determine the exact nerve root that is involved.
- Myelogram may be done to determine the size and location of disk herniation.
- Nerve conduction velocity test may also be done.
- Spine MRI or spine CT will show that the herniated disk is pressing on the spinal canal.
- Spine x-ray may be done to rule out other causes of back or neck pain. However, it is not possible to diagnose a herniated disk by a spine x-ray alone.

Treatment

The first treatment for a slipped disk is a short period of rest with medicines for the pain. This is followed by physical therapy. Most people who follow these treatments recover and return to normal activities. Some persons will need to have more treatment. This may include steroid injections or surgery.

MEDICATIONS

Medicines can help with your pain. Your doctor may prescribe nonsteroidal anti-inflammatory medications (NSAIDs for long-term pain control. Narcotics may be prescribed if the pain is severe and does not respond to NSAIDs.

If you have back spasms, you will usually receive muscle relaxants. In rare cases, steroid medicines may be given, either by pill or through a vein (IV), to control your back pain.

LIFESTYLE CHANGES

Diet and exercise are very important for improving back pain if you are overweight.

Physical therapy is important for nearly everyone with disk disease. Therapists will teach you how to properly lift, dress, walk, and perform other activities. They teach you how to strengthen muscles that help support the spine. You will also learn how to increase flexibility in your spine and legs.

Take care of your back at home:

- Reduce activity for the first few days. Slowly restart your usual activities.
- Avoid heavy lifting or twisting your back for the first 6 weeks after the pain starts.
- After 2 to 3 weeks, gradually start exercising again.

INJECTIONS

Steroid medicine injections into the back in the area of the herniated disk may help control pain for several months. These injections reduce swelling around the disk and relieve many symptoms. Spinal injections are usually done in your doctor's office.

SURGERY

Surgery may be an option if your symptoms do not go away with other treatments and time.

Discectomy is surgery to remove all or part of a disk.

Discuss with your doctor which treatment options are best for you.

Outlook (Prognosis)

Most people improve with treatment. But you may have long-term back pain even after treatment.

It may take several months to a year or more to go back to all of your activities without having pain or straining your back. People who work in jobs that involve heavy lifting or back strain may need to change their job activities to avoid injuring their back again.

Possible Complications

In rare cases, the following problems can occur:

- Long-term back pain or leg pain
- Loss of movement or feeling in the legs or feet
- Loss of bowel and bladder function
- Permanent spinal cord injury (very rare)

When to Contact a Medical Professional

Call your health care provider if:

- You have severe back pain that does not go away
- You have any numbness, loss of movement, weakness, or bowel or bladder changes

Prevention

Being safe at work and play, using proper lifting techniques, and controlling weight may help prevent back injury.

Your health care provider may recommend a back brace to help support the spine. A brace can help prevent injuries in people who lift heavy objects at work. But using these devices too much can weaken the muscles that support your spine and make the problem worse.

Alternative Names

Lumbar radiculopathy; Cervical radiculopathy; Herniated intervertebral disk; Prolapsed intervertebral disk; Slipped disk; Ruptured disk; Herniated nucleus pulposus

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