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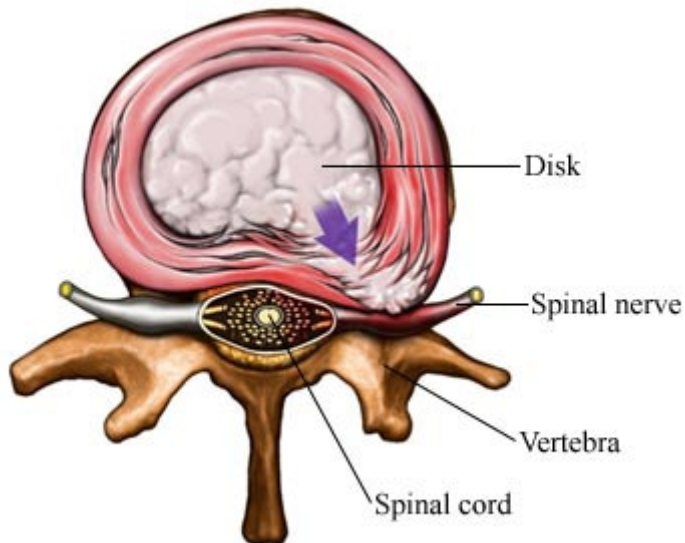
Herniated Disc

by Amy Scholten, MPH

Definition

Discs are small circular cushions between the bones in the spine. The bones are called vertebrae. The discs are compressible. They act as cushions for the vertebrae. A herniated disc happens when discs in the spine bulge from their proper place. This is most common in the lower spine.

Herniated Lumbar Disc



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Causes

Herniated discs can occur when discs lose water content, become flatter, and provide less cushioning. If they become too weak, the outer part may tear. The inside part of the disc may then push through the tear. This can put pressure on the nerves next to the disc.

Risk Factors

These factors increase your chance of developing a herniated disc:

- Age: 30s and 40s
- Trauma from a fall, accident, or sudden twisting
- Strain on the back—either repeated or sudden (as from lifting a heavy weight)
- Certain jobs that require heavy lifting

Symptoms

Symptoms include:

Pain—how severe the pain is depends on which disc is herniated and how large the herniation is

Pain may spread over the buttocks, down the back of one thigh, and into the calf

Pain may be in one leg (more common) or both legs

Numbness, tingling, or weakness in the legs or feet

Numbness, tingling, or weakness in one or both arms

In severe cases, inability to find comfort even lying down

Sudden aching or twisted neck that cannot be straightened without severe pain

Cauda equina syndrome—involves bowel or bladder changes and/or numbness in the groin

Note: This is an emergency, Call 911

Diagnosis

The doctor will ask about your symptoms and medical history. A physical exam will be done.

Your spine will be examined. The doctor will test the movement, strength, and reflexes of the arms and legs.

Tests may include:

X-ray—a test that uses radiation to take a picture of structures inside the body, especially bones

CT scan—a type of x-ray that uses a computer to make pictures of structures inside the body

MRI—a test that uses magnetic waves to make pictures of structures inside the body and allows both the bones and the disc to be seen

Diskography—a test that involves injecting a dye into the center of the disc and then taking an x-ray, which may show the dye leaking out

Electrodiagnostic testing—a test that measures the electrical activity of muscle by placing needle electrodes into the muscle

Myelography—a type of x-ray that uses dye injected in the space around the spinal cord to more clearly outline the space containing the spinal cord and nerves, can show any disc herniation

Treatment

Treatments may include:

Physical Medicine

Bed rest

During acute phase, back or neck massage and physical therapy to:

- Relax the neck or back muscles

- Decrease pain

- Increase strength and mobility

Back and abdominal exercises during recovery phase

Hot or cold packs—to reduce pain and muscle spasms

Stretches for the spine: A doctor or chiropractor can sometimes help reduce pain by stretching your spine. Any spinal manipulation must be done carefully by an experienced, licensed practitioner.

Traction (weights and pulleys)—to relieve pressure on the discs and keep you from moving around (more common for discs in the neck area)

Neck collar or brace for a herniated disc in the neck—to relieve muscle spasms

Medications

Your doctor may prescribe:

- Nonsteroidal anti-inflammatory drugs (NSAIDs)—to reduce inflammation and pain (eg, ibuprofen, naproxen)

- Muscle relaxants—to reduce muscle spasms

- Pain medications

Interventional Spine Care

Steroid injections into the area around the nerve and disc. It is done to reduce pain and inflammation. The injections are used if other medications do not work.

Minimally invasive procedures may include:

- Nucleoplasty

- Intradiscal electrotherapy (IDET)

- Chemoneucleolysis

Surgery

Surgery may be used for people who fail to respond to other treatments. Immediate surgery is necessary for cauda equina syndrome. Options include:

- Laminectomy —removal of some of the bone over the spine and of the problem disc

- Microdiscectomy —removal of fragments of herniated disc through a small incision (also known as intervertebral discectomy)

- Spinal fusion —fusing of vertebrae (back bones) together with bone grafts or metal rods (rarely done for first-time disc problems)

Prevention

To help reduce your chances of getting a herniated disc, take the following steps:

- Practice good posture. Stand and sit straight, and keep your back straight when lifting.

- Maintain a healthy weight.

- Exercise regularly. Ask your doctor about exercises to strengthen your back and stomach.

- Don't wear high-heeled shoes.

If you sit for long periods of time, use a stool to bring your knees above your hips.

RESOURCES:

American Academy of Orthopedic Surgeons

<http://www.aaos.org>

American Chiropractic Association

<http://www.amerchiro.org>

REFERENCES:

Awad JN, Moskovich R. Lumbar disc herniations: surgical versus nonsurgical treatment. *Clinical Orthopaedics & Related Research* . 2006;443:183-197.

Ellenberg M, Honet JC. *Frontera: Essentials of Physical Medicine and Rehabilitation* . Philadelphia, PA: Hanley and Belfus; 2002, chap 46.

Goldmann DR. *American College of Physicians Complete Home Medical Guide* . New York, NY: DK Publishing; 1999.

Slipman CW, Derby R, Simeone FA, Mayer TG. *Interventional Spine: An Algorithmic Approach*. Philadelphia, PA: Saunders Elsevier; 2008.

When you have a herniated disc. American Academy of Family Physicians website. Available at:

<http://www.aafp.org/online/en/home.html> . Published 2003. Accessed July 2, 2008.

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