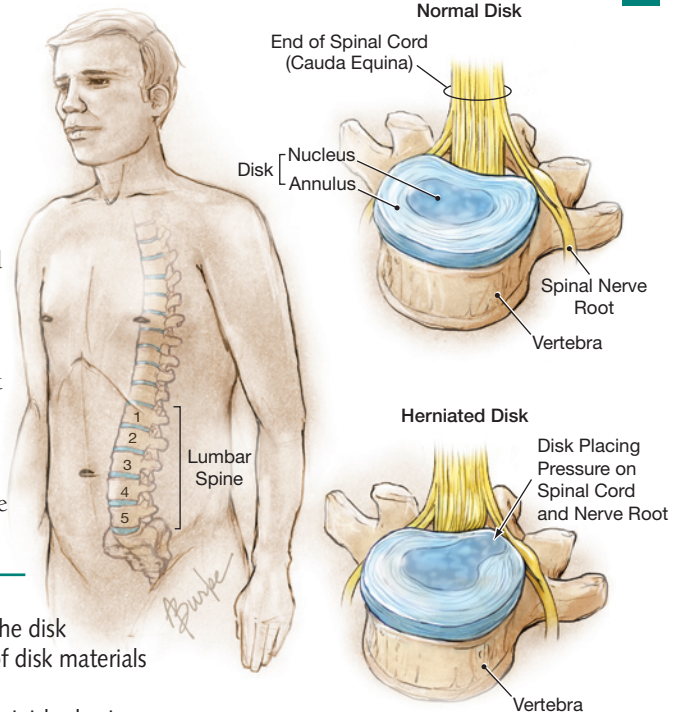


Herniated Lumbar Disks

The **vertebrae** (bones of the spine) are cushioned by blocks or pads of tissue called **disks**. These disks are round and flat and made up of 2 parts: the **annulus** (a tough outer capsule or ring) and the **nucleus** (an inner, spongy core of jellylike material). When these disks are healthy, they act as shock absorbers for the spine and are essential in keeping the spine flexible. The normal, everyday pressures on the spine force the outer surface to bulge slightly. When these disks are damaged from an injury, normal wear and tear, or disease, they may bulge abnormally or **rupture** (break open). When a damaged disk bulges abnormally or ruptures, it is called a **herniated** (slipped) **disk**. Herniated disks can occur in any part of the spine but most often affect the **lumbar spine** (lower back). The abnormal disk material can place pressure on the adjacent spinal cord or **nerve roots**, resulting in pain, numbness, or weakness in areas of the lower back, buttocks, and legs. The November 22/29, 2006, issue of *JAMA* includes 2 articles about surgery for herniated disks.



RISK FACTORS FOR A HERNIATED DISK

- Natural aging process—ongoing loss of water and proteins from the disk
- **Genetic** (inherited) predisposition—an accelerated degeneration of disk materials
- Obesity—excessive body weight places added stress on the spine
- Lack of exercise—results in a loss of trunk muscle strength and diminished spine support
- Work activities—long periods of sitting, lifting or pulling heavy objects, frequent bending or twisting, heavy physical exertion, repetitive motions, or exposure to constant vibration
- Smoking—deprives blood flow and nutrients needed for disk repairs
- History of back injury, previous herniated disk, or prior back surgery

CONSULT YOUR DOCTOR IF

- A moderate injury causes immediate numbness or weakness in one or both legs
- You have shooting leg pains with coughing, sneezing, or straining
- Leg pain is accompanied by persistent weakness, tingling, or numbness
- Back pain persists or builds in intensity over a few weeks' duration
- Back pain is accompanied by pain during urination
- You experience severe deep back muscle pain and muscle spasms
- You have loss of bowel or bladder control

DIAGNOSIS AND TREATMENT OPTIONS

Diagnosis is based on a complete medical history accompanied by a thorough physical examination performed by your doctor. Tests involving imaging of the spine are sometimes done. Treatments can include oral medications, drug injections, and physical therapy. Most back and leg pain will resolve with these simple measures. For persons who have chronic pain and disability, surgical options may be considered.

FOR MORE INFORMATION

- American Academy of Family Physicians
<http://familydoctor.org/341.xml>
- American Association of Orthopaedic Surgeons
www.aaos.org
- American Association of Neurological Surgeons
www.neurosurgerytoday.org/what/patient_e/herniated.asp

INFORM YOURSELF

To find this and previous JAMA Patient Pages, go to the Patient Page Index on JAMA's Web site at www.jama.com. Many are available in English and Spanish.

Sources: American Academy of Family Physicians, American Association of Orthopaedic Surgeons, American Association of Neurological Surgeons

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