

# LUMBAR DISK DISEASE

Your lumbar spine (low back) is made of five vertebrae separated by cartilaginous disks that serve as the "shock absorbers" of the spine. They act as a cushion between the bones and allow some flexibility of the lower back. Degenerative changes or trauma may rupture the annulus fibrosus, the tough band of cartilage surrounding each disk, and disk material may bulge or herniate into the spinal canal or nerve root canal. The herniated or bulging piece of the disk or degenerative bone spur may compress the spinal cord or nerve root, causing pain in the back or "tingling and numbness" that may radiate to the buttocks, hips, groin, or legs. The pain from a bulging or herniated disk is worse on movement and may be worsened by coughing, laughing, or straining while having a bowel movement. Some patients also have weakness, clumsiness, drop foot, or walking intolerance.

## **Living With Your Diagnosis**

Degenerative changes in the disks are a normal process as we age. Tobacco abuse, poor posture, and strenuous work with poor lifting technique may accelerate the degenerative changes. The disks gradually become worn, less plump, and eventually flattened. When the disk space becomes narrow enough that the vertebrae rub one another, then wear and tear changes develop at the edges of the vertebrae. This wear and tear causes bone spurs to develop that may begin to press on the end of the spinal cord and/or one of its nerve roots. As the nerve becomes irritated, it may cause back and leg pain, tingling and numbness, or weakness in the legs or feet. Rarely, with extremely large, acute disk herniations, a loss of bladder and bowel control may occur.

## **Treatment**

If your physician suspects that you have a lumbar disk that is causing a problem, one or more of the following tests may be ordered: computed tomography (CT) scan (special x-ray pictures of the spine); magnetic resonance imaging (MRI: special non—x-ray pictures of the spine); myelogram/CT (x-ray of the spinal canal and nerve roots), or an electromyogram/nerve conduction velocity test (EMG/NCV: an electrical test of the nerves and muscles). Conservative treatments such as physical therapy, ultrasound, localized heat, and special exercises are usually performed by a trained physical therapist. Injection of steroids and an anesthetic medication into the spinal canal may provide some relief in patients with chronic pain. Generally, surgery is the final option if conservative treatments have failed to relieve the symptoms. Your surgeon will discuss the risks and benefits of surgery.

## **The DOs**

- Maintain good posture while sitting and walking.
- Always wear a seat belt when traveling in a motor vehicle.
- If you must sit for long periods, make a lumbar support by placing a small pillow or rolled towel between your low back and the seat. Stand and walk about frequently (about every hour) to reduce low back fatigue and strain.
- Always lift heavy objects with proper straight spine posture. Hold the object close to your body and use your thigh and leg muscles to lift.
- Participate in a regular exercise program approved by your physician.

## **The DON'Ts**

- Avoid sitting for long periods. If you must sit or drive for long periods, stop in a safe place and walk for 10 minutes.
- Avoid lifting and twisting, pushing or pulling heavy objects; always use your leg muscles to lift.
- Don't use tobacco. This causes cumulative injury to your spine by damaging the normal repair process in the disks and vertebrae.
- Don't return to work without clearance from your physician.
- Don't engage in any strenuous activities until cleared with your physician.
- Don't resume driving until you are pain free or your pain is tolerable without pain medications.

## **When to Call Your Doctor**

- If you have any problems associated with your medications.
- If your symptoms become much worse or if you have new signs of weakness.

- If you have difficulty walking, develop weakness or inability to move your limbs, or have loss of control of your bowels or bladder.

**For More Information**

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