

Herniated Disk

Overview: The spinal column is composed of a series of 24 bones called vertebrae that are separated from each other by a disk. These disks help absorb the shock from everyday wear and tear. The disks are about the size of four silver dollars stacked on one another. Their consistency is like a jelly donut and is surrounded by tough ligaments. The jelly center is called a nucleus. This nucleus will flatten out and bulge depending on the stress applied to the back. If the force is too much, the nucleus can rupture and break through the surrounding ligament. When this happens a nerve is pinched causing pain.

Diagnosis: A ruptured disk does not produce low back pain, but instead causes pain at the end of the pinched nerve at the arm or leg into the hand or foot. It can be associated with tingling, numbress or weakness in the extremity. The onset may have been associated with excessive physical activity or a traumatic incident such as a car accident. When the doctor examines the patient, he or she will look for signs of nerve involvement through a careful neurologic exam, checking sensation, strength and reflexes. To confirm the presence of a ruptured disk, the doctor will order a myelogram, CAT scan or a magnetic resonance test (MRI) to visualize the spinal column.

Treatment: Depending on the pain and potential for nerve damage, there are a number of ways to treat a herniated disk. In some patients, the nerves can be severely injured, causing loss of bowel or bladder function. If this is the case, it is an emergency and the disk must be surgically removed. Fortunately, in most patients, this rarely occurs. Patients usually present with pain and minimal loss of nerve function. Conservative treatment consists of a combination of physical therapy, medications, and injections. Physical therapy is useful for reducing a bulging disc and taking pressure off the nerve. A specific set of exercises, called the McKenzie program, is usually used. Medications can be given over a short-term basis to allow the patient to sleep more comfortably and to increase his or her level of function. These medications consist of anti-inflammatory drugs, muscle relaxants and a reasonable dose of narcotics like Tylenol with codeine, Darvocet 100's, or vicodin. Under no circumstances should more than three to four doses of narcotics be consumed in a 24-hour period because of potential injury to the liver or kidneys. If physical therapy and medications are inadequate for control of pain, injections can be given to ease the discomfort. Epidural steroid injections apply powerful antiinflammatory drugs to the involved nerve root, easing pain and swelling secondary to disc irritation. The injections are usually given as a series of two to four over a period of weeks. Relief can begin within 72 hours of the first injection. Patients experiencing severe pain despite medications, physical therapy and injections may decide to have surgery. Surgery is advised only if a ruptured disk is confirmed with the CT scan, MRI or myelogram along with severe pain in the foot or hand.

Prevention: The best way to treat a ruptured disk is to prevent it from happening.

Spine care Stop/avoid smoking Maintain ideal body weight Proper strength training Proper posture