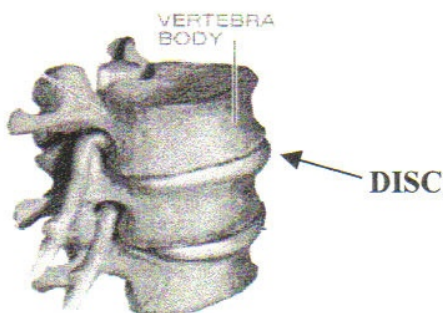


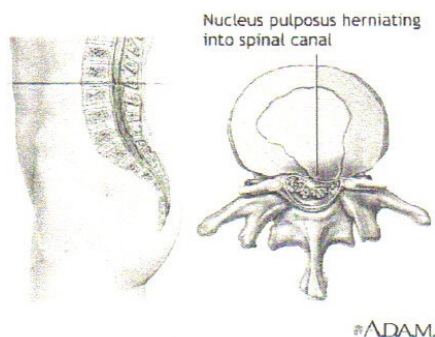
## Herniated Disc

**What is disc?** The spine is composed of a series of bones called vertebrae. A disc is a type of connective tissue that is located in between each vertebrae. Each disc acts as a shock absorber between the vertebrae. The discs also aid in spinal movement and flexibility as we twist and bend.

**What is a disc made of?** The disc is made of a tough outer layer called the annulus fibrosus and a gel-like center called the nucleus pulposus. The discs are shaped like a hockey puck and are basically cartilage rings. In general, the discs have a high content of water and this is what makes them flexible.



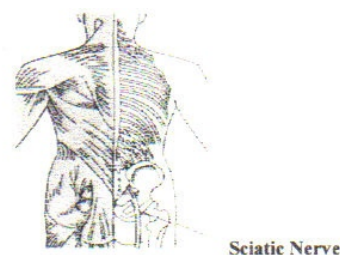
**What causes a disc to herniate?** As we age, the center of the disc (nucleus pulposus) may start to lose its water content, making the disc less effective as a cushion. This may cause a displacement of the disc's center through a crack in the outer layer. Frequently, disc herniations occur in the last two discs of the lumbar spine, at and just below the waist.



Alpha Physical Therapy, Inc.  
1681 Cranston Street, Suite A  
Cranston, RI 02920  
(401) 223-0230

**What are some other causes for a herniated disc?** Activities that place us in a bent or "flexed" position can cause the low back to lose its natural curve. Activities such as extended sitting, driving, reading or watching TV may promote poor posture.

**What causes the pain?** Most commonly, a disc herniates towards the back not the front. The back-side of the disc has many nerves. The herniated disc can irritate these nerves, especially the ones traveling down the legs, this can cause feelings of pain and or numbness as far down as the foot and toes. This is called sciatica.



### Treatment

Many patients with a new or acute disc herniation will improve without surgery. The doctor will usually prescribe non-surgical treatment initially. Non-surgical treatment options include:

- Anti-inflammatory medications to reduce swelling and control the pain
- Physical therapy
- Epidural steroid injection

### The goals for non-surgical treatment are to:

- Reduce the irritation of the nerve and disc
- Improve the physical condition of the patient
- Protect the spine and increase overall function

A physical therapist can instruct a patient in proper exercise such as gentle stretches or postural modification techniques to reduce the back pain or leg symptoms. As the pain diminishes, more vigorous exercises will improve flexibility, strength, and endurance and allow the patient to return to a more normal lifestyle. Learning and continuing a home exercise and stretching program are important aspects for the treatment of a herniated disc.