

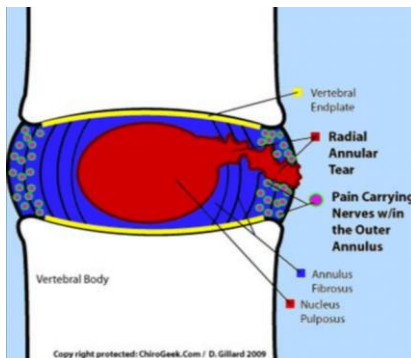
ANNULAR TEAR

What is an annular tear?

As its name suggests, an annular tear is a tear of the annulus of a spinal disc. Spinal discs are similar to jelly doughnuts in that they have a soft center (called the nucleus) surrounded by a tougher/ligamentous exterior (called the annulus) that contains the nucleus.

Causes

Usually as the result of some kind of trauma, the annulus can become injured and tear. Sometimes the tear is so severe that nucleus squirts out of the disc; this is called a “herniated disc”. If the annulus does not rupture, nucleus becomes entrapped in the pain-sensing part of the annulus causing chemical inflammation and subsequent irritation of nerve endings in the annulus.



Treatments

If conservative treatment with physical therapy and epidural steroid injections fails to improve pain, surgical treatment may be indicated. One of the most effective surgical techniques is via a minimally invasive laser endoscopic spine surgery.

How does a laser treat the annular tear?

In addition to mechanically removing nucleus disc fragments trapped in the annulus with graspers, this disc material can be vaporized with the laser. To learn more about laser endoscopic spine surgery, visit MISCOE.org or [click here](#) for an informational packet and [here](#) for examples of actual surgeries on our YouTube page.

Symptoms

Most patients experience low back pain but often leg pain, numbness, or tingling if the annular tear is located next to a spinal nerve. Symptoms are often worse with sitting and positions that load pressure on the disc (like coughing, sneezing, bending, and lifting) tend to aggravate symptoms.

