

Annuloplasty

Pain in the back and neck can result from several causes, including injury to a *disc*. One intervertebral disc is found between each two vertebral bodies throughout the spine and provides cushioning and stability to the spine.

These discs are composed of a central gelatinous material called the *nucleus*. The nucleus is surrounded by a tough, fibrous ring called the *annulus*. With trauma or repetitive activities, this outer ring can develop a weak area or fissure.

Patients with such an injury to the lumbar spine often have back pain with a little leg pain (sciatica). Prolonged sitting is usually difficult. Testing, including MRI and Discography, can often confirm the diagnosis.

Treatment of an Annular Fissure is done by heating the disc to promote healing of the tear in the annulus. This is performed by placement of a needle-like probe into the disc under direct x-ray vision. The probe is then heated in the area of the tear and removed. No incision is necessary. Over the ensuing weeks, the injuries heal and beneficial scarring occurs to tighten this outer ring.

This is an outpatient procedure, performed with local anesthesia and mild sedation. It has a very favorable side effect profile compared to open surgery. However, technical risks do exist which should be discussed before the procedure.