# **Cervical disc herniation treatment**

- ISASS Recommendations and Coverage Criteria for Bone-Anchored Annular Defect Closure Following Lumbar Discectomy: Coverage Indications, Limitations, and/or Medical Necessity-An ISASS 2025 Policy Update on the Use of Bone-Anchored Annular Closure to Prevent Reherniation in High-Risk Lumbar Discectomy Patients
- The CASINO trial: surgical versus conservative management in patients with cervical radiculopathy due to intervertebral disc herniation: a prospective cohort study
- Systematic Review and Meta-Analysis of Pestle Needle Therapy in Managing Insomnia, Cervical Spondylosis and Other Systemic Diseases
- Application value of Ultrasound-Guided cervical nerve root block test before percutaneous nucleoplasty in the treatment of patients with cervical chest pain: A retrospective study
- Cerebral ischemia, a rare postoperative complication of cervical disc herniation: a case report
- The effect of neck mobilization Vs. combined neck and lumbar mobilization on pain and range of motion in people with cervical disc herniation: A randomized controlled study
- Postoperative Physical Therapy for Cervical Total Disc Replacement: A Case Report
- Could the Hanging Drop Technique Be an Alternative Method to Loss of Resistance in Cervical Epidural Injections?

The common treatment modalities for the chronic persistent pain of cervical disc herniation are related to surgery or epidural injections.

Modalities include physical therapy which may also include cervical traction.

# **Cervical epidural steroid injection**

Cervical epidural steroid injection.

### **Cervical traction for cervical disc herniation**

Cervical traction for cervical disc herniation.).

Pain surgery:

Trigger point injection, facet joint injections,

### **Cervical radiculopathy treatment**

see Cervical radiculopathy treatment.

#### Update

Silva and Almeida published an update in 2021<sup>1)</sup>.

# **Cervical disc herniation surgery**

#### see Cervical disc herniation surgery.

Most patients with symptomatic cervical spine disc herniation with radiculopathy recover. Possible recurrences and time to complete recovery need to be further studied. More studies are also needed to understand the prognostic factors for this condition <sup>2)</sup>.

The role of surgical versus nonsurgical treatment of patients with cervical disc herniation has not been adequately studied. The majority of published data reflects surgical outcomes, with little available data regarding the outcome of nonoperatively treated patients. Frequently, these patients are treated surgically if they have neurologic loss or radiculopathy that persists after rest or minimal intervention.

Nonoperative treatment includes physical therapy involving strengthening, stretching, and potentially traction, as well as specific physical therapeutic exercise, oral anti-inflammatory medication, and patient education.

Sustained Traction: A steady constant tension is applied at a prescribed load (weight). Sustained traction is well suited for disc herniations, muscle spasms other soft tissue tightness.

Saal et al treat patients with cervical herniated nucleus pulposus and radiculopathy with an aggressive physical rehabilitation program.

All patients treated by the authors during a specified time period with a clearly defined diagnosis of cervical herniated nucleus pulposus were evaluated for outcome.

Twenty-six consecutive patients with cervical herniated nucleus pulposus and radiculopathy were evaluated by an investigator other than the treating physician. The follow-up time was more than 1 year in all patients. Data analyzed included symptom level, activity and function level, medication and ongoing medical care, job status, and satisfaction. Inclusion criteria included a focal cervical disc protrusion of less than 4 mm identified on magnetic resonance imaging and a major complaint of extremity pain compatible with cervical radiculopathy. Exclusion criteria included severe central canal stenosis, symptomatic cervical myelopathy, or condition that precluded participation in the rehabilitation program. Management consisted of traction, specific physical therapeutic exercise, oral anti-inflammatory medication, and patient education. The majority of patients presented with neurologic loss.

Twenty-four patients were successfully treated without surgery. Twenty patients achieved a good or excellent outcome of these 19 had disc extrusions. Two patients underwent cervical spine surgery. Twenty-one patients returned to the same job. One patient retired.

Many cervical disc herniations can be successfully managed with aggressive nonsurgical treatment (24 of 26 in the present study). Progressive neurologic loss did not occur in any patient, and most patients were able to continue with their preinjury activities with little limitation. High patient

satisfaction with nonoperative care was achieved on outcome analysis <sup>3)</sup>.

Maigne and Deligne, studied the natural evolution of cervical soft disc herniations in 21 patients with cervical radiculopathy that was successfully treated with conservative therapy only. The first computed tomography (CT) examination was performed during the acute phase of the radiculopathy, and the second performed from 1 to 30 months after healing. The initial CT allowed classification of the herniations according to size: nine were considered small, seven medium, and five large. Comparison with follow-up scans showed that five of the herniations decreased between 0 and 35%, six decreased between 35 and 75% and ten decreased between 75 and 100%. The largest herniations were those that had the greatest tendency to decrease in size. This tendency could be secondary to the herniation breaking through the outer fibers of the anulus and entering the epidural space <sup>4)</sup>.

Thirty-eight patients with cervical disc herniation who underwent repeated magnetic resonance imaging examinations were studied. The changes over time in herniated disc size were evaluated using this imaging technique. Evaluation showed the characteristics of those in whom spontaneous regression was found, such as extrusion pattern, and the clinical outcome was evaluated by symptoms.

In 15 patients (40%), the volume of herniated material was decreased. The interval from onset of symptoms to the initial examination was significantly shorter in the regression group than in the group that showed no change in disc herniation. By extrusion pattern, cervical disc herniation, which was divided into migration type on sagittal view and lateral type on axial view, most frequently exhibited spontaneous regression. All of the patients with radicular pain and upper limb amyotrophy were treated successfully with conservative therapy.

Although the possibility of the combination of hemorrhage and disc material could not be denied, active resorption of herniated material probably occurred during the acute phase. Extruded material exposed to the epidural space may be resorbed more quickly than that beneath the ligament. Vascular supply probably plays a role in the mechanism of resorption. The phase and position of extrusion were the significant factors affecting cervical disc herniation resorption. It was demonstrated that examination performed during the acute phase using magnetic resonance imaging is necessary for elucidation of the pathogenesis of cervical disc herniation, and that migrating, lateral-type herniations regress so frequently that conservative treatment should be chosen not only for patients with radicular pain, but also for those with upper limb amyotrophy <sup>5)</sup>.

1)

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