

# Degenerative Cervical Spine: About Surgical Treatment

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## Brief Report

Disc herniation's and stenosis of the spinal column and/or neural foramen are common degenerative changes in the cervical spine. Cervical radiculopathy is caused by lateral or medial compression of nerve roots, and it is a surgical indication in cases of substantial motor impairments or persistent discomfort. Incurion of the median canal can cause spinal cord compression and cervical myelopathy. Because its natural history is usually marked by episodic degeneration, surgical decompression is recommended in cases with obvious myelopathy symptoms. Anatomical pictures of the cervical spine can be obtained using imaging techniques. The adoption of one approach over another will be determined by the clinical situation and therapeutic alternatives. Plain-film X-rays are still important because they allow doctors to assess alignment and bone changes, and they're also valuable for post-treatment follow-up. Magnetic resonance imaging's higher contrast resolution allows for evaluation of soft tissues such as intervertebral discs, ligaments, bone marrow, and the spinal cord. Because of its high spatial resolution and ability to reveal osseous components, computed tomography's function in the research of degenerative disease has shifted in recent years.

The anatomy and biomechanical properties of the cervical spine are covered first, followed by a more in-depth look at the degenerative illnesses that can damage the cervical spine and how to treat them. Special implants, such as a c spine disc prosthetic or total disc repair, or simple compression of the cervical nerve roots, can be used to preserve motion in the spinal cord. Fusion operation, on the other hand, can be done successfully. Motion-

preserving procedures, as well as contraindications and indications for fusion surgery cTDR are recommended in rare situations of soft disc herniation, particularly in younger people who have no indications of myelopathy. If anterior surgery is not practicable, posterior decompression may be done as an alternative. Cervical spine fusion appears to be the superior option in cases of severe degeneration, kyphosis, severe canal invasion, instability, and myelopathy. Changes in the bony and disco ligamentous components of the cervical spine can cause mechanical abnormalities in the anatomy, resulting in degenerative changes. Basic surgical indications include compression syndrome and deformation or instability. Osteoporosis of the C1-C2 facet causes sub occipital pain syndrome in the upper cervical spine due to mainly unilateral degenerative alterations of the atlantoaxial facet. The treatment of choice is fixation and atlantoaxial fusion. Atlantoaxial instability is caused by the existence of os odontoideum in a few cases. Radicular symptoms are caused by a narrowing of the lateral recess in the subaxial spine. Imaging procedures such as computed tomography or magnetic resonance imaging should be used to back up the clinical complaints. The results of selective decompression are satisfactory.

Neurophysiologic tests are required in the case of spondylitis cervical myelopathy. Treatment options include posterior decompression with laminoplasty or anterior decompression with corpectomy of the affected segments, both of which have similar outcomes. The precise placement of the painful segment in the presence of axial neck discomfort is a challenge for doctors and radiologists. Only in cases when the clinical results match the radiologic changes can surgical fusion be considered as a last resort for alleviating the uncomfortable condition.

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