C3-C4 cervical disc herniation

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- Reperfusion injury case following cervical fusion with OPLL: a case report and literature review
- Prevalence of neurological diseases associated with cervical pain and/or signs of cervical myelopathy in French bulldogs: a retrospective analysis of 105 cases
- C3-C4 cervical disc herniation producing Brown-Sequard syndrome: A case report and review of the literature
- Biomechanical evaluation on a new type of vertebral titanium porous mini-plate and mechanical comparison between cervical open-door laminoplasty and laminectomy: a finite element analysis
- Surgical Essentials and 2-Year Follow-Up Results of Channel Repair in Endoscopic Transcorporeal Discectomy for Cervical Disc Herniation
- Degenerative Cervical Disc Herniation: Prevalence of Affected Cervical Level in a Hispanic Population in Puerto Rico
- An unusual case of pediatric cervical myelopathy due to congenital spinal canal stenosis
- Combined flexion and compression negatively impact the mechanical integrity of the annulus fibrosus

Case reports

A rare case of cervical myelopathy was observed in a 14-year-old patient, who was previously a healthy boy treated with cervical laminoplasty, which was caused by cervical spinal canal stenosis based on multiple-level disc herniation. The patient presented to the clinic with spastic and ataxic gait with previous diagnostic challenges. Magnetic resonance imaging showed cervical degenerative changes mainly marked at the C3-C4 and C4-C5 levels, along with canal narrowing and a central high signal cord abnormality on T2-weighted images. A C3-C4 open-door laminoplasty surgery technique was performed. The neurological symptoms and signs improved dramatically following surgery. Subsequently, cervical computed tomography and magnetic resonance imaging showed good decompression of the cervical spinal cord during the 5 years of follow-up with the preservation of the range of movement. We concluded that though it is pretty rare, cervical myelopathy should be considered in diagnosing adolescent patients with gait and balance disorders [1)].

An 82-year-old female presented to our service with progressive myelopathy. Cervical spinal imaging revealed a large disc herniation at C3-C4 and severe spinal canal stenosis. Vascular imaging showed anomalous ICAs bilaterally overlying the prevertebral fascia at the midline. The patient received aspirin preoperatively and underwent a multidisciplinary approach with neurosurgery and otolaryngology. A standard transcervical approach centered on the C5-C6 disc space, where the carotid arteries splayed most from the midline, allowed for facilitated visualization and mobilization of the vessels. Prevertebral dissection was then performed rostrally to the C3-C4 disc space. The patient was put into burst suppression prior to retraction and underwent uncomplicated anterior discectomy and fusion.

KCS is a rare but critical presentation of extreme medial displacement of bilateral ICAs. Few cases have been reported in the spinal surgery literature. Knowledge of this rare variant is important to

avoid iatrogenic injury and complications [2].

1)
Yalçın Demirci AY, Yiğitkanlı K. An unusual case of pediatric cervical myelopathy due to congenital spinal canal stenosis. Acta Orthop Traumatol Turc. 2023 Mar;57(2):85-88. doi: 10.5152/j.aott.2023.21083. PMID: 37140247.
2)
Mathkour M, Scullen T, Debakey M, Beighley A, Jawad B, Riffle J, Abou-Al-Shaar H, Tubbs RS, Kalyvas J. Anterior cervical discectomy and fusion in the setting of kissing carotids: A technical report and literature review. Clin Neurol Neurosurg. 2021 Jan;200:106366. doi: 10.1016/j.clineuro.2020.106366. Epub 2020 Nov 18. PMID: 33276217.