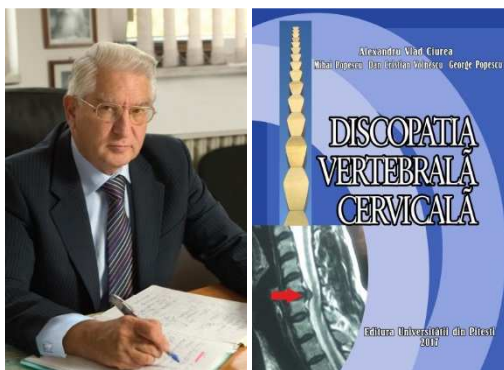


## Cervical Vertebral Discopathy

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The monograph published by Pitesti University Publishing House in 2017 under the coordination of Prof. Alexandru Vlad Ciurea MD, PhD, MSc. represents an important step in the study of a frequent contemporary pathology.

Cervical vertebral discopathy is a polymorphic ailment of the modern society. This pathology became more frequent in the past years due to the modern way of life: incorrect postures, sedentariness, tempestuous physical exercises, bad diet, excessive use of different substances (ex: alcohol, Tabaco, etc.) and many other factors.

The clinical diagnosis is represented by pain in the cervical region with or without radiation to the upper limbs, in the early stages. The symptomatology can evolve in late stages to uni or bilateral neurological deficits

of upper or lower limbs, difficulty or impossibility in walking or standing.

In different population studies in USA, the prevalence of cervical vertebral discopathy is around 3.5-4 out of 1000. This frequent ailment of the active population caused the elaboration of clear and concise diagnosis and treatment criteria, precise medical protocols and the modernization of both conservative and surgical treatments.

Due to increased prevalence of this degenerative pathology in the active population, the authors recorded an increased number of neurosurgical interventions because the decompression of the dural sac and nerve roots is mandatory in most cases. Since the publishing of “Cervical Vertebro-Medullary Pathology” by Prof. Constantin Arseni no other treatise was dedicated to this cervical degenerative pathology alone, until now.

Today, this polymorphic ailment benefits from a complete and correct clinical and imagistic diagnosis through CT/MRI in association with electromyography.

The Gold-Standard investigation is the cervical MRI (non-invasive, non-ionizing) which can correctly diagnose the degenerative cervical ailment in all the scanned sequences:

T1, T2, STIR, FLAIR. This investigation can highlight the presence of a cervical vertebral canal stenosis, posterior longitudinal ligament ossification and spondylolisthesis.

Currently, there exists the possibility of a perfectly curative treatment and controllable evolution through a complex management – do not forget that the cervical region is an extremely fragile region which connects the head to the rest of the body.

In the evolution of surgical treatment methods there were different vertebral disc substitution techniques. It started with an osseous graft for the iliac crest, followed by different biomaterials (Palacost, Pyramesch), and culminated with the insertion of a cervical cage made out of PEEK (polyeter-eterketon) biomaterial. Even more than that, the authors mention an even better solution, which is currently under study: the use of autologous fatty tissue (Recent study from 2017 on 300 patients – Istanbul – favorable evolution).

A cage made out of PEEK is one of the safest implants in disk hernia treatment. It is a material with no proven cytotoxicity (in vitro studies). This implant has no corrosive, allergenic or carcinogenic properties. It has the same elasticity as the bone and prevents the kyphosis of the cervical region. It is also an MRI-compatible material. The authors dedicate an entire chapter to the disk hernia surgical treatment: from incision to closing the patient.

The current, most frequent surgical treatment is represented by ACDF (Anterior Cervical Discectomy with Fusion) and has remarkable postoperative morpho-functional results.

The presented treatise covers the subject of cervical vertebral discopathy in a manner adequate for a medical resident or a young specialist in the field of neurosurgery, neurology and medical recovery. The monograph discusses related anatomy, semiology, physiology, physiopathology in a concise manner and offers both conservative and surgical therapeutic solutions. Its entire content is based on the complex experience of the authors in the field of degenerative cervical pathology at the Neurosurgical Department of Elias Clinical Hospital and the Neurosurgical Department of Sanador Clinical Hospital.

The neurosurgical part is discussed based on clinical, imaging and operatory data. The subject of treatment is covered presenting both anterior and posterior surgical approaches.

The monograph contains 200 pages filled with rich iconography and a modern bibliography and contains substantial anatomy information related to the cervical region: vertebral column, spinal cord and cervical plexus.