

**CONSERVATIVE TREATMENT WITH SPINAL STENOSIS OF CERVICAL LOCALIZATION****Tuygunoy Raxmonberdievna Xodjanova**

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**Annotation.** 110 patients with spinal stenosis of the cervical spine were examined. The clinical picture differs with polymorphism of combinations of reflex, radicular and spinal syndromes, reflecting multiple and multilevel involvement of various structures of the spinal canal -roots, vessels, vegetative fibers and spinal cord. Our conservative treatment of spinal stenosis has a positive clinical effect, which makes it possible to recommend it to a wider application in outpatient and inpatient practice.

**Keywords:** degenerative spinal stenosis, clinical manifestations, conservative therapy

**Introduction.** The incidence of spinal canal stenosis is, according to various authors, from 6% to 10% [1, 6, 12, 13]. The possibilities for diagnosing spinal canal stenosis have expanded [11]. However, key issues of etiology, pathogenesis, clinical manifestations, as well as treatment tactics for the spinal stenosis remain largely unresolved, despite the long history of studying the pathology. Patients with spinal stenosis traditionally undergo surgical treatment [3, 5, 12]. Some authors have noted positive results from the use of periradicular and epidural blockades with corticosteroids in 75% of patients with lumbar spinal stenosis [8, 9]. The purpose of the study is to identify clinical and neurological symptoms in patients with spinal stenosis (SCS) of the cervical localization and to evaluate the effectiveness of the proposed conservative therapy.

**Material and methods.** We studied 110 patients with cervical SPC, aged from 35 to 70 years, the average age was  $48.2 \pm 1.1$  years, there were 62 men (56.4%), 48 women (43.6%). All patients underwent clinical neurological examination, CT or MRI examination. In CT and MRI studies of our patients, we calculated the area of the spinal canal using the formula:  $S = A \times B / 2$ , where A is the frontal size of the spinal canal; B – sagittal size of the spinal canal, which in all observations, regardless of the type of spinal canal stenosis, was from 100 mm<sup>2</sup> to 75 mm<sup>2</sup> – relative stenosis. The patients received basic therapy, including non-steroidal anti-inflammatory drugs, muscle relaxants, vasoactive drugs (Actovegin 5.0 ml for 10 days), B vitamins, anticonvulsants, physiotherapeutic treatment, physical therapy. Physiotherapy included neck traction therapy, ultrasound therapy (phonophoresis) with Karipazim gel. Karipazim gel was applied to symmetrical areas along the affected area of the spine. The exposure was 7-10 minutes, followed by a massage with Karipazim cream. There are 10-12 procedures per course. In the presence of

contraindications to electrophoresis (cardiovascular failure, the presence of an artificial pacemaker, arrhythmias, cancer and skin diseases), they were used according to the criteria of the MacNab scale [10] (which, although first published back in 1971, are widely used to assess the outcome of surgical treatment of vertebrogenic pathology, we used it to assess the outcome of conservative treatment of spinal stenosis) there are 4 possible treatment outcomes:

- excellent – no pain and restrictions in mobility, return to previous work and previous level of activity;
- good – rare/periodic non-radicular pain, reduction in the severity of existing symptoms, return to work with minor restrictions;
- satisfactory – some increase in functional activity, the patient remains disabled/bedridden;
- bad – symptoms of root compression persist, repeated surgery is necessary.

**Results.** In all patients, CT and MRI data revealed cervical SPC. The causes of stenosis in our patients were spondyloarthrosis in 89 (80.9%), of which 21 (19.1%) had a combination of spondyloarthrosis with herniated intervertebral discs of various locations. In 18 (16.4%) the cause of stenosis was grade I and II spondylolisthesis, of which in 11 (10%) people it was combined with a medial hernia. The magnitude of disc prolapse according to CT and MRI data ranged from 3 mm to 6 mm

When analyzing anamnestic data, it was revealed that in 24 (21.8%) patients the disease began with numbness in the cervical-occipital region, followed by weakness in the arms. In 30 (27.3%) patients, the disease began with the gradual development of weakness in the arms, mainly in the distal parts. In several observations, weakness was combined with hypotrophy of the small muscles of the hand, and in one case with fascicular twitching in the pectoral muscles. In 14 (12.7%) patients, the first signs of the disease were weakness in the legs, a feeling of “stiffness” in the legs and difficulty walking. In assessing neurological syndromes, we used the classifications of I.P. Antonov (1985) [2] and D.G. German [4] and A.A. Skoromets [7]. The clinical and neurological picture of the disease was presented in the form of the following compression syndromes: reflex – in 65 (59.1%) patients, radicular – radiculopathy – in 62 (56.4%) people, and spinal – radiculomyelopathy – in 80 patients (77, 3%). Reflex syndromes were presented in the form of vegetative-vascular disorders - chilliness of the hands, severity of the venous pattern, pallor or cyanosis of one or two hands, marbling of the skin, pastiness, dryness or hyperhidrosis of the hands; the Claude Bernard-Horner symptom complex was observed in 25 patients. The clinical picture of cervical radicular syndrome depended on damage to the anterior or posterior roots, with corresponding motor, sensory and reflex disorders.

Radiculomyelopathies were manifested by amyotrophic lateral sclerosis syndrome (in 36 patients), Brown-Séguard syndrome (in 5 patients), lateral column syndrome (in 32 patients), Personage-Turner syndrome (in 5 patients). Thus, the clinical manifestations of spinal canal stenosis that we identified cervical localization were not monosyndromes. There was a combination of them in different combinations, indicating the diversity of clinical manifestations and multiple and multi-level involvement of various structures of the spinal canal - roots, vessels, autonomic fibers and the spinal cord. An analysis of treatment results according to the MacNab scale after conservative treatment showed the following results: excellent in 11 patients, good in 82 patients, satisfactory in 16 patients, poor in 1. The favorable treatment outcome (excellent and good) in 93 (84.5%) patients and satisfactory in 16 (14.5%) patients was due, in our opinion, to the fact that the majority of our patients were young and middle-aged with relative spinal canal stenosis. In addition, 32 (29.1%) patients had herniated intervertebral discs at the cervical level. Conclusion. In patients with cervical spinal canal stenosis, the clinical and neurological picture is characterized by polymorphic combinations of reflex (59.1%), radicular (56.4%) and spinal (77.3%) syndromes, reflecting multiple and multi-level involvement of various structures of the spinal canal - roots, vessels, autonomic fibers and spinal cord. The complex conservative treatment we proposed for spinal canal stenosis at the cervical level was effective in the vast majority of cases (84.5%), which allows us to recommend it for wider use in outpatient and inpatient practice.

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