

ment (in the form of a significant regression of neurological deficit until the full restoration of impaired functions).

The novelty of the method is optimization of the therapeutic effects as a result of a combination of two high-performance techniques (DENS and acupuncture) in one procedure. The positive aspect of this method of treatment is a significant reduction in the time spent on the procedure due to the impact on the paretic extremities with acupuncture needles simultaneously at several points. Thus there is no need for long and sequential treatment of limbs with DENS is used without acupuncture. Stimulation of the scalp area using DENS allows to handle it absolutely without any pain. Impact on cervical-collar zone and lumbosacral zone using external electrodes (applicators) devices DENS can be used to treat patients with severe motor disabilities and limited mobility in bed. Additionally, we have experience of application of acupuncture and DENS as independent procedures (for example, classic acupuncture in the morning, and DENS in the afternoon.) The efficiency of this combination is very high, but time-consuming due to the DENS therapy.

Described method of treatment can be implemented in any specialized medical facility.

Conclusions.

Thus, application of this method has several advantages:

1. Possibility of using DENS-therapy and acupuncture at any stage of rehabilitation, including the acute phase.
2. Optimization of therapeutic effects as a result of a combination of two high-performance techniques: DENS and acupuncture in one procedure.
3. Faster recovery of lost functions after cerebral ischemic stroke, the growth rate of regression of neurological deficit, and thus improved the quality of patients' life.
4. Significant decrease in the severity of pain during the procedure.
5. Reduction of the time required for conduction of procedure and simplification the procedure itself.

References

1. Goldstein L.B., Bertels C., Davis J.N. Interrater reliability of the NIH stroke scale // Arch. Neurol. – 1989. – Vol. 46: 660-662.
2. Lindmark B. Evaluation of functional capacity after stroke with special emphasis on motor function and activities of daily living // Scand. J. Rehabil. Med. Suppl. – 1988. – Vol. 21: 1-40.
3. Molchanova E.E. [Clinical efficiency of dynamic electroneurostimulation in the acute period of ischemic stroke] // Vestnik vosstanovitel'noj mediciny №1 (65). – 2015: 33-36
4. Molchanova E.E., Grishhenko Ju.S., Ananenko V.A. The method of treatment of cerebral ischemic stroke in an acute period – Patent RF №2531693 №2013148202/14; opubl. 27.10.2014, Bjul. № 30. – 9 p.
5. Starodubceva O.S., Begicheva S.V. [Analysis of the incidence of stroke using information technology] // Fundamental'nye issledovaniya. – 2012. – № 8-2: 424-427.

**UDC 61    DOI 10.22448/AMJ.2017.3.123-124**  
**TWO-STAGE TREATMENT OF COMPRESSION-RADICULAR SYNDROMES CAUSED BY HERNIATED INTERVERTEBRAL DISCS**

**V.A. Ananenko, E.Y. Molchanova**

Amur State Medical Academy, Blagoveschensk, Russia

Abstracts: 80 patients with herniation of intervertebral discs in the lumbosacral region of the vertebral column were examined. 40 patients received a course of traditional medical treatment, while 40 patients underwent a two-stage treatment of compression-radicular syndromes. The first stage included the use of acupuncture and pharmacopuncture by the homeopathic preparation of Zeel T. The second stage is the long-term use of electrophoresis with karipazim against the background of complete clinical recovery of patients. The complex usage of acupuncture and pharmacopuncture by the preparation of Zeel T in the first stage of treatment of intervertebral hernias makes it possible to significantly reduce the intensity of the pain syndrome, the violation of the statics of the spine, and the loss of functions of the damaged spinal nerve. The usage of electrophoresis with karipazim allows conservatively to reduce the volume of the herniated intervertebral disc, which in turn increases the duration of remission, reduces relapses in the future and can be used as an effective supplement to traditional treatment.

Key words: pharmacopuncture, electrophoresis of karipazim, compression-radicular syndromes.

Herniation of intervertebral discs is a widespread occurrence of osteochondrosis of the vertebral column and it often determines the quality of life and the level of social adaptation of patients.

The present research is aimed at evaluation the effectiveness of two-stage treatment of compression-radicular syndromes caused by herniated intervertebral discs.

**Materials and methods** 80 patients with herniation of intervertebral discs in the lumbosacral region of the vertebral column were examined, 40 men (50%) and 40 women (50%) aged from 18 to 58 (average age 42). The group under research included patients with clinical presentations of compression of roots L5, S1. Thorough clinical-neurological research was carried out with everyday monitoring of intensity of symptoms which showed function disorders of spinal-vertebral roots and pain symptoms. 40 patients received a course of traditional medical treatment, while 40 patients underwent a two-stage treatment of compression-radicular syndromes. The first stage included the use of acupuncture and pharmacopuncture by the homeopathic preparation of Zeel T (manufactured by Heel, Germany). The complex usage of acupuncture and pharmacopuncture is aimed at arresting the exacerbation of clinical manifestations of compression-radicular syndrome. The second stage is the long-term use of electrophoresis with karipazim against the background of complete clinical recovery of patients. The use of karipazime is aimed at reducing the hernial protrusion in the area of rupture of the disk sheath. Homoeopathic medications of the company "Heel" were applied for pharmacopuncture. The dose of the medication was calculated individually in each case. During one procedure medication was injected into 4-10 points with the help of a thin injection needle with the diameter up to 0,3 mm. In this case medications were injected not deeply, intracutaneously or subcutaneously. Surface intracutaneous level of injection (from 1 to 1,5 mm) and microdoses of the medication supported existence of a constant skin reservoir with low local diffusion. Karipazim was received during electrophoresis from the anode "plus". The treatment was carried out in 8 courses (1 course included 10 procedures). Breaks between the procedures for 1-2 days were allowed. Repeated courses were held in 30 days. Preparation of the solution: 1(1/2) bottle of caripazim is diluted in 5-10 ml of physiological solution right before the procedure with 2-3 drops of Dimexidum added to the solution. The solution is applied on white filter paper placed on the pads of the electrode, the dimensions of the electrode pad are 10×15 cm.

**Results and discussion** 72 patients had one-sided nerve root pains, in 8 cases pains were two-sided. In most cases (80%) root pains were accompanied by vegetative disregulations. In all cases the intensity of root pains was considerable, patients complained of everyday root pains, background and cramping. Background pain was continuous, had "compressing", sometimes "pulsatory" character with distinct irradiation to the leg. Cramping root pain was provoked by movements in the vertebral column and was more intensive and irradiating in the lower extremity on the way of innervation of the affected spinal nerve.

Pharmacopuncture was the method of influence which included injections of medications into biologically active points. In the acute period of the disease patients received injections in a day, after improvement of condition – 2-3 times a week. Pharmacopuncture had especial importance in treatment of pain syndromes connected with nerve roots and elimination of pathologic tone of muscular fibers. Zones of painful muscular regions had trigger points or zones with the disturbed mechanism of relaxation of muscular fibers. These zones were constantly in tense and firm. The reflexotherapist injected medications just right into biologically active points located in trigger zones. As a result, tense muscular fibers relaxed and ceased excessive pressure on nerve roots. At the same time, edema decreased, normal blood supply to tissues appeared, oxygen exchange in the affected zone and the system of evacuation of metabolism products improved. It should be mentioned that trigger points complicated work of the vertebral column not only at the place of their location; they also correspondingly disturbed functioning of other organs and systems. When treating osteochondrosis, pharmacopuncture allowed to improve the correct metabolism in cartilaginous tissue, eliminate inflammation, normalize mobility of intervertebral joints, to stop the disease progress.

In the group of patients receiving the course of pharmacopuncture all characteristics of root pains including background and cramping pains were much lower than in the group of patients undergoing the course of traditional medical therapy which proves a greater therapeutic effect of pharmacopuncture. Besides, after the course of pharmacopuncture sensitive and motor functions of compressed spinal nerve roots recovered authentically faster.

Electrophoresis of karipazim was applied after the course of pharmacopuncture in case of maximum clinical recovering of patients. Karipazim is characterized by proteolytic activity of a wide spectrum. The medication consists of three proteolytic ferments (papain, hymopapain, proteinase) and mucolytic ferment lysozyme which contain sulfhydryc groups in their active centres. Due to pharmacological qualities of karipazim after completing 8 courses of electrophoresis in 75% of the cases authentic reduction of the size of intervertebral hernia was noted (from 2 to 5 mm.).

**Conclusions** Thus, the complex usage of acupuncture and pharmacopuncture by the preparation of Zeel T in the first stage of treatment of intervertebral hernias makes it possible to significantly reduce the intensity of the pain syndrome, the violation of the statics of the spine, and the loss of functions of the damaged spinal nerve (rootlet). Combination therapy significantly accelerates the processes of clinical recovery by reducing aseptic inflammation, venous congestion and edema at the site of compression of the spinal nerve. The usage of electrophoresis with karipazim allows conservatively to reduce the volume of the herniated intervertebral disc, which in turn increases the duration of remission, reduces relapses in the future and can be used as an effective supplement to traditional treatment.

#### References

1. Gavaa Luvsan Traditional and modern aspects of oriental reflexotherapy. – Moscow, 1992.
2. Surskaya E.V. Modern aspects of dorsopathy / RMJ. 2009. № 20. P. 1311