

Acupuncture analgesia for compression neuromuscular syndromes

Ji Yubo, A.T. Kachan, A.S. Nikischenkova, P.G. Guzalov, S.N. Zhulev, N.M. Zhulev (GBOU VPO North-Western State Medical University named after Mechnikov of the Ministry of Health and Social development of Russia, St. Petersburg)

Acupuncture analgesia for the treatment of compression neuromuscular syndromes

Ji Yubo, AT Kachan, AS Nikischenkova, PG Guzalov, SN Zhulev, NM Zhulev
Northwestern State University named after I. Technikov (Russia, St. Petersburg)

SUMMARY

This article examines methodologies of acupuncture treatment of compression neuropathies. Special attention is paid to acupuncture, as one of the most effective non-drug methods of treatment. The article also describes the mechanisms of acupuncture pain relief and recommended treatment programs.

Key words: non-drug methods of treatment, acupuncture anesthesia, compression neuromuscular syndromes, mechanisms of acupuncture analgesia, inhibitory and exciting method of acupuncture.

RESUME

The article considers ways of acupuncture technique for compression neuropathy. Great attention is paid to the analgesic effect of reflex therapy. Also the article describes mechanisms of acupuncture anesthesia and advice medical programs.

Keywords: nonpharmacological therapy, acupuncture analgesia, compression and neuromuscular syndromes, mechanisms of acupuncture analgesia, braking and exciting method of acupuncture.

Introduction

Compression neuromuscular syndromes are the most common neurological disorders. One of the most effective non-drug methods of treatment is acupuncture and, as a part of it, acupuncture. Compression of nerve formations can occur between the fascia and a tense muscle, between the abdomen of one or more muscles, between a muscle and a tendon of another muscle, a muscle and a joint, tendons, a tendon and a joint, a bone and a muscle, a bone and a fascia or a tendon, as well as a hernial protrusion of the intervertebral disk [3]. For example, when the muscles of the neck, back and spine are strained, along with the vessels, the spinal roots, paravertebral autonomic ganglia, somatic and autonomic nerve plexuses and nerves are compressed. As is known, divergence of autonomic and somatic impulse streams begins from the spinal level. Therefore, a consequence of the development of tension in the corresponding

muscle and the formation of denervation-demyelination loci through the corresponding segment of the spinal cord - interconnected skin and visceral fibers are painful sensations. A significant place in the development of pain syndrome (as mentioned above) is occupied by muscle-tonic disorders, which is a compressing factor of nerve formations and the cause of spontaneously arising algia.

As you know, a motor act consists of two components: tonic, which ensures constant muscle tone, and physical, which ensures the implementation of active movements.

At the level of the spinal cord, the tone is carried out due to the activity of gamma-motor neurons, and targeted - due to the activity of the alpha-motor neurons of the anterior horns of the spinal cord. Research L.A. Makarova (1973) and V.Sh. Gorokhovskaya (1977) [1] has convincingly shown that acupuncture allows you to selectively modulate the activity of alpha and gamma motor neurons by selecting specific acupuncture points (TA) and the method of action in them. Consequently, this mechanism of acupuncture is one of the components of the analgesic effect of this type of influence on the state of muscle tone, and also makes it possible to stimulate motor activity during compression of nerve formations.

Mechanisms of acupuncture analgesia

Currently, the mechanisms of acupuncture pain relief have been studied in detail [2]. The most important structures that implement acupuncture analgesia are the posterior horns of the spinal cord, suture nuclei, reticular formation of the brainstem, central gray matter, hypothalamus, thalamus and cerebral cortex. Acupuncture stimulates antinociceptive brain structures, as a result of which specific chemical agents (endorphins, enkephalins) are released, mediating the analgesic effect.

The segmental mechanisms of acupuncture analgesia are realized as a result of the interaction of sensory flows of pain and from acupuncture in the V layer of the posterior horn of the spinal cord. An increase in the reflex activity of the spinal cord is possible with weak stimulation of segmental mechanisms and is realized by an increase in the activity of moto- or autonomic neurons of the segment. As a result, the tone of the striated and smooth muscles slightly increases. A decrease in the reflex excitability of the spinal cord is possible as a result of recurrent inhibition of the afferent flow in the spinal cord (posterior horn or central zones of the segment).

Suprasegmental mechanisms of acupuncture analgesia are carried out by corticopyramidal and extrapyramidal influences. The specificity of the zones of influence depends on the connection of the points with the organs and systems of the body. The action of acupuncture is due to the receipt of sensory information from the irritated receptor apparatus along the nerve to which the receptor formations belong, or along the perivascular nerve formations. When the needles are inserted into the acupuncture points (TA) to a certain depth, as a rule,

there are peculiar sensations of aches, bursting, pressure, numbness, a feeling of the passage of an electric current, "anticipated sensations". Each TA has its own name and purpose according to the direction of action and innervation connections. When choosing the points of influence, one should get an idea of the pathogenetic essence of the process, the pathophysiological structure of the formation of individual symptoms and the elucidation of the mechanisms underlying their development. In acupuncture, there are two main methods: inhibitory and exciting. With a brake, the needles are inserted for a period of 30 to 40 minutes with the achievement of the expressed intended sensations. And with a stimulating needle, the needles are inserted for a period of 5 to 20 minutes. The inhibitory method is used for pain syndrome and muscle hypertonicity, and the exciting method is used to stimulate motor activity.

Recommended treatment programs

1. Syndrome of the lower oblique muscle of the head.
Main points (OT): 15VG [1], 16VG, 20VB, 12VB, 10V. Additional points (DT): 19VB, 18VB, 8VB, 10VB, 9VB, 11VB. Auricular points (AT): AT29 [2], AT37, AT41, AT51, AT55.
2. With cervical lumbago and cervicalgia.
FROM: 13VG-16VG, 10V, 11V, 15TR, 15GI-18GI, 12IG, 13IG, 21VB, 20VSB.
DT: 17VG-19VG, 12E, 10E, 9E, 11E.
AT: AT37, AT41.
3. Syndrome of the anterior scalene muscle (Nafziger syndrome).
FROM: 10V, 11V, 9E, 10E, 11E, 12E, 20VB, 21VB, 4GI, 10GI, 14GI, 15GI, 16GI, 17GI, 10IG, 14IG, 15IG, 16IG, 17IG, 5TR, 15TR, 16TR, 17TR, 14VC, 15VC.
DT: 14E, 15E, 27R, 26R, 1P, 2P, 22VC, 21VC, 20VC.
AT: AT41, AT37, AT55, AT51, AT121.
4. Syndrome of the pectoralis minor. OT:
22R-27R, 18VG-20VG, 1P, 2P, 1C, 1MC. DT:
12E-14E, 15G1, 16GI.
AT: AT39, AT42, AT64, AT63.
5. Shoulder-hand syndrome.
FROM: 5TR, 8TR, 5GI, 4GI, 11GI, 4IG, 5IG, 6MC, 7MC, 7C, 5C, 14TM, 12VC, 16VC, 20VC, 15GI, 18G1, 15IG, 15TR, 14 TR, 10IG, 14IG, 15IG, 11V, 42V-44V, 20VB, 21VB.
DT: 60V, 11IG, 12IG, 13IG, 8IG.
AT: AT62, AT67, AT66, AT65, AT63, AT64.
6. Pectalgic syndrome.
FROM: 1C, 1MC, 1P, 2P, 18VC, 19VG, 20VG, 22R-27R, 17RP-21RP, 13E-18E.
DT: 11V-17V, 14VG, 12VC.
AT: AT37, AT41, AT42, AT39, AT121, AT51, AT83.
7. Interscapular pain syndrome.
FROM: 11V-17V, 41V-46V, 11IG, 13IG-15IG, 11VG-14VG.
DT: 14GI-17GI, 15TR, 16TR.
AT: AT39, AT42, AT41.

8. Pelvic floor syndrome.

FROM: 31V-34V, 27V-30V, 54V, 35V, 2VG, 3VG, 4VG, 5VG.

DT: 25V, 26V, 60V, 64V, 65V, 40V.

AT: AT56, AT55, AT53, AT51, AT115, AT38, AT40. 9.

Lumbago and lumbodinia.

FROM: 31V-34V, 53V, 54V, 25V-28V, 4VG, 5VG. DT:

35V-37V, 60V, 64V, 65V, 40V, 55V, 20VG. AT: AT38,

AT40. AT54, AT53, AT115, AT55, AT51. 10. Syndrome of the piriformis muscle.

FROM: 31V-35V, 53V, 54V, 2VG-4VG.

DT: 40V-38V, 36V, 59V, 58V, 65V, H59, H58, H100, H101, H102. AT:

AT53, AT54, AT40, AT38, AT26, AT51, AT55.

11. Anterior tibial syndrome.

FROM: 36E-40T, 34VB, 39VB.

DT: 41E-43E, 1F-4F, 5RP. 12.

Peroneal syndrome. FROM:

32VB-36VB.

DT: 30VB, 40VB, 41VB, 36E, 62V, H82-H81, H92, H79, H78. AT:

AT49, AT116.

Conclusion

As the pain syndrome subsides and muscle tension decreases, they move on to acting on local (local) TA, intended mainly for influencing the underlying tissues (nerves, muscles, blood vessels, ligaments, joints).

In each of the above programs, it is necessary to take into account the syndrome and its severity in order to choose the method of exposure to acupuncture.

Literature

1. Ignatov Yu.D., Kachan A.T., Vasiliev Yu.N. Acupuncture analgesia: Experimental and clinical aspects. - L.: Nauka, 1990. -- 256 p.
2. Kachan A.T. The successes of the St. Petersburg school of acupuncture // J. Non-drug medicine. - SPb. - No. 1. - 2005. - S. 28-30.
3. Lobzin V.S., Zhulev N.M., Tyukarkina A.B., Badzgaradze Yu.D., Zhulev S.N. Diagnostics of early vegetative and vascular changes in compression-ischemic neuropathies // New in the diagnosis and treatment of nervous diseases. - SPb., 1993. - S. 15-20.

Author's address

Ji Yubo

Department of Neuropathology. S.N. Davidenkov State Budgetary Educational Institution of Higher Professional Education North-Western State Medical University

named after Mechnikov

[1] The indexing of corporal TA has been brought in line with the French classification.

[2] The numbering of the auricular points is given in accordance with the French classification.

Acupuncture analgesia for compression neuromuscular syndromes / Ji Yuibo, A.T. Kachan, A.S. Nikischenkova, P.G. Guzalov, S.N. Zhulev, N.M. Zhulev // Traditional medicine. - 2011. - No. 4 (27). - S.32-34.

[To favorites](#)