

An integrated approach to the correction of myofascial syndromes of the cervical scapular region L.G.

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Complex approach to the correction of cervical-, humeroscapular myofascial syndromes

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RESUME

The aim of the study was to optimize the treatment of patients with myofascial pain syndrome at humeroscapular level by combination of bioresonance therapy and manual therapy. The study established high efficiency of the proposed therapeutic approach. This is confirmed by a distinct improvements in physical and mental condition of the patients, significantly surpassing in this respect characteristics of comparative treatment groups.

Keywords: dorsopathies, myofascial pain syndrome, adaptive bioresonance therapy, manual therapy.

SUMMARY

The aim of the work was to optimize the treatment of patients with myofascial pain syndromes at the cervical-collar level by combining bioresonance effects and manual therapy. As a result of the study, the effectiveness of the proposed therapeutic approach was established. This fact is confirmed by a clear improvement in the indicators of the physical and mental state of patients, surpassing (in a number of positions - reliably) the characteristics of the compared treatment groups.

Key words: dorsopathies, myofascial pain syndrome, adaptive bioresonance therapy, manual therapy.

Introduction

The social significance of dorsopathies is determined by the prevalence, damage to people of the most active age and a characteristic protracted course - according to the number of days of disability, the process follows the "leading" influenza and injuries [5]. Among the variety of clinical manifestations of dorsopathies, myofascial pain syndrome (MFBS) stands out with the involvement of both muscle fibers and their fascia in the pathogenesis [3, 4].

At the same time, the classical methods of correction of MFBS are far from always effective, and in some cases they are accompanied by negative phenomena. To a large extent, this refers to muscle syndromes at the cervical-collar level, with participation in the process of autonomic formations. In connection with

thus, the issue of including effective and safe methods of traditional medicine in treatment regimens is becoming increasingly important [1, 2]. In our opinion, promising in this situation is a complex of methods of manual and apparatus exposure, in particular - manual and bioresonance therapy (BRT).

The lack of convincing information in the available literature on the effectiveness of this approach in specific forms of dorsopathies determined the goal of the study - to optimize the treatment of patients with myofascial pain syndromes at the cervical level by combining manual and bioresonance therapy.

Materials and methods

The study included 90 patients (68 women and 22 men) with clinical manifestations of MFBS at the cervico-humeral-scapular level. The age of the surveyed ranged from 20 to 60 years, with a predominance of persons in the range of 30–50 years, ie. the most working age. The duration of the disease varied from 1 to 10 years or more (on average, 3.5 ± 2.2 years). The duration of the last exacerbation ranged from 1 to 5 months, on average 2.9 ± 0.5 months. The control group (to establish a number of conditional norm indicators) consisted of 15 healthy individuals who did not complain about the condition of the spine.

All patients underwent clinical and neurological examination, supplemented by X-ray and, in some cases, MRI diagnostics. Additional research methods included special muscle diagnostics, assessment of the "visual analogue scale" (VAS), as well as analysis of the "well-being-activity-mood" (SAN) and Spielberger anxiety tests.

In accordance with the set goal, the patients were divided into three comparable groups, 30 people in each. In all groups, conventional drug treatment was carried out, including nonsteroidal anti-inflammatory drugs, muscle relaxants, vitamins of group B. In addition, manual therapy was used in group 1, bioresonance therapy (BRT) in group 2, and their combination.

In the work, preference was given to gentle manual therapy techniques - Mitchell's myoenergetic, fascial, articular, strain-constrain, etc. BRT was performed using the IMEDIS-EXPERT apparatus (IMEDIS, Russia). In this case, a combined version of endogenous and exogenous therapy was used with fixed frequencies in the range from 1.2 to 9.8 Hz ("swing" mode), intensity 30 units. All groups underwent 10 treatment procedures, with a frequency of three times a week.

The effectiveness of the impact was determined according to standard criteria, highlighting the positions of "significant improvement", "improvement", "no effect", "deterioration". The data obtained were processed using the Statgraphiks statistical software package developed by BISK JNS (USA).

results

The vertebral nature of the disease was confirmed by the data of X-ray and tomographic studies. In particular, it was noted on the radiographs

flattening or kyphotic deformity of cervical lordosis, displacement of the vertebral bodies, a decrease in the height of the intervertebral discs and a number of other characteristic signs.

The nature of complaints and clinical manifestations of the disease testified to the formation of muscular-tonic syndrome in 100% of cases. Manual and kinesiological diagnostics reflected the presence of dynamic and static shifts in all patients, disturbances in motor patterns (including walking patterns), and a decrease in the stretch reflex of the muscles concerned. Painful muscle compaction was detected by palpation. The intensity of pain syndrome, according to the VAS scale, averaged 59 ± 0.9 points.

The results of psychological testing reflected a significant ($p < 0.05$) decrease in all indicators of SAN in comparison with the control measurements. In particular, the indicator of "well-being" averaged 3.2 ± 0.4 ; "Activity" - 3.6 ± 0.3 ; "Mood" - 3.7 ± 0.3 points versus $5.2-5.4 \pm 0.3$ points in the control group.

According to the Spielberger test, a high and very high degree of anxiety was established in the group, correlating with the severity of the algic component and the duration of the course of the disease. Thus, the severity of situational anxiety was 48.4%, personal anxiety - 46.8%. The presented data reflect a low tolerance to life situations, which fits into the picture of the initial manifestations of psychosomatic syndrome.

In general, the nature of the revealed psychosomatic shifts indicates and the need for appropriate therapeutic measures.

As a result of the analysis of the clinical efficacy of the compared treatment options, the advantage of the complex combining manual and bioresonance therapy was established. Thus, a significant improvement (a distinct regression of subjective and objective characteristics) and improvement (a decrease in only subjective manifestations) in this group amounted to 90% versus 80% and 86.7% in the first two groups (Table 1).

At the same time, the positive dynamics of neurological symptoms, including the restoration of the stretch reflex, was traced in all groups, however, with a difference in the timing of their achievement. So, the regression of static-dynamic disorders in the 1st group was noted by the fifth procedure, while in the 2nd and 3rd groups - already by the second or third procedure.

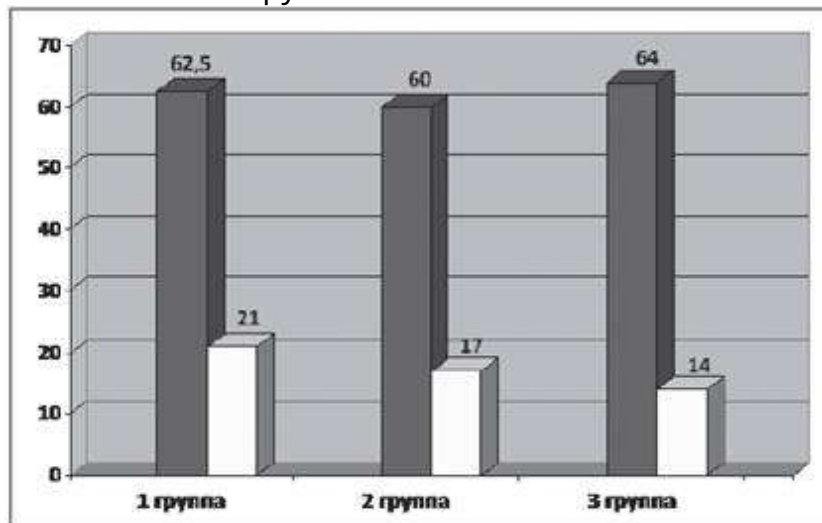
Table 1

Effectiveness of methods of influence

Группы (число наблюдений)	Значительное улучшение		Улучшение		Незначитель- ное улучшение		Без эффекта		Ухудшение	
	Абс.	%	абс.	%	абс.	%	абс.	%	абс.	%
1 (n = 30)	8	26,7	16	53,3	4	13,3	1	3,3	1	3,3
2 (n = 30)	11	36,7	15	50	3	10	1	3,3	—	—
3 (n = 30)	13	43,3	14	46,7	3	10	—	—	—	—

The features in the dynamics of pain syndrome have also been established. Patients of the 1st group only after the fourth procedure of manual therapy felt the antinociceptive effect ($p < 0.05$), which reached its peak by the eighth procedure. In patients of the 2nd group, in the case of bioresonance therapy, the analgesic effect was manifested a little earlier - after the third or fourth procedure, reaching stabilization by the seventh procedure. In the 3rd group, in response to the combined effect, a decrease in the severity of algias was observed after the second procedure, and the maximum analgesic effect was noted by the fourth or fifth procedure.

Digital correlates of pain syndrome, according to the VAS scale, are shown in Fig. 1, again with the advantage of the 3rd group. No statistical differences were observed here, however, there is a tendency to potentiate the therapeutic effects of manual and bioresonance therapy.



Rice. 1. Dynamics of pain syndrome intensity (according to the VAS scale).

Psychological research according to the SAN method reflected the positive dynamics of the studied parameters, and they were statistically significant in the 3rd group and only in the first two parameters (Table 2). According to the results of the Spielberger test, positive dynamics of the psychological state was observed in 25 (83.3%) patients of the 1st group, 24 (80%) in the 2nd group and 26 (86.6%), i.e. outside the statistical differences between the indicators presented.

table 2

Dynamics of SAN indicators in groups during treatment

Группы	n	Самочувствие		Активность		Настроение	
		До	После	До	После	До	После
1	30	3,2 ± 0,4	3,9 ± 0,5	3,5 ± 0,4	4,0 ± 0,6	3,6 ± 0,6	3,8 ± 0,4
2	30	3,3 ± 0,4	4,0 ± 0,3	3,5 ± 0,4	4,0 ± 0,5	3,5 ± 0,5	3,9 ± 0,5
3	30	3,3 ± 0,3	4,5 ± 0,4*	3,4 ± 0,5	4,3 ± 0,4*	3,6 ± 0,5	3,9 ± 0,4

Примечание: * – достоверность различий ($p > 0,05$)

Conclusion

The results of the study confirm that for the fastest

regression of symptoms in myofascial pain syndrome of the cervical-shoulder-scapular level, it is advisable to combine bioresonance and manual therapy. This thesis concerns both the neurological and mental status of patients. The therapeutic effectiveness of the proposed complex is most likely due to the multidirectional effect on the main links of the pathological process.

Literature

1. Agasarov L.G. Rehabilitation technologies for dorsopathies: Tutorial. - ed. 2nd. - M., 2010 - 95 p.
2. Gotovsky M.Yu., Perov Yu.F., Chernetsova LV. Bioresonance therapy. ed. 2nd. - M, 2010 .-- 215 p.
3. Putilina M.V. Vertebral pain syndrome // Medical Council. - 2009, no. 3. - S. 44-52.
4. Arnau JM, Vallano A., Lopez A., Pellise F., Delgado MJ, Prat N. A critical review of guidelines for low back pain treatment // Eur. Spine J. - 2006,15 (5). - R. 543-553.
5. Woolf AD Understanding the burden of musculoskeletal conditions / AD Woolf, K. Akesson // BMJ. 2001. - Vol. 322. - P. 1079-1080.

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