Analgesic, psychotherapeutic and health-improving effects of music-reflexotherapy carried out by an innovative device

"AkuTon"

R.S. Shusharjan, N.I. Eremina, G.O. Samsonova (Scientific Center for Music Therapy and Restorative Technologies, Moscow, Russia; European Academy of Music Therapy, Bulgaria; FGBU RSC

MRiK Ministry of Health of the Russian Federation,

## Moscow, Russia)

We have developed a device "AkuTon" for musical-acoustic magnetic-vacuum effects on reflexogenic zones in order to activate adaptive capabilities and pain relief. The proposed device includes a massage jar for vacuum therapy with a working unit, inside which an acoustic translator is mounted to the fitting, and to it, in turn, a magnetic rod is attached. An experimental work was carried out, the main purpose of which was to study the effect of the "AkuTon" device on pain sensitivity and the general condition of patients with dorsalgia.

## Materials and methods

52 sportsmen of different sex, aged from 23 to 35 years old, suffering from moderate dorsalgia were examined. By the method of random selection, they were divided into 2 groups: experimental (EG), which was exposed to the device "AkuTon" (25 people) and control (CG) - 27 people, who received conventional vacuum therapy. 5 procedures were performed daily, each lasting 15 minutes. During one procedure, one or two pairs of corporal acupuncture points and the most painful points of the back, detected by palpation, were taken, on which the developed devices were fixed using the created vacuum, after which they began to select the broadcast of one of the receptive music therapy programs. The effectiveness of treatment was assessed on the 1st and 5th day by examination and psychological testing on a numerical rank scale (Bonica JJ, 1990).

## Results

Already after the first procedure, more than 50% of patients noted a noticeable decrease in pain syndrome and an improvement in general well-being. On examination, a decrease in tension in painful areas and pain sensitivity during palpation was determined. Throughout the study, according to the data of the numerical rank scale, there was a tendency towards a higher efficiency of the combination of musical-acoustic magnetic-vacuum effects in relation to vacuum monotherapy. By the 5th procedure, this difference reached the level of statistical significance (p <0.05). Significant changes took place in the EG, where the SI value increased from 574 to 750 units (p  $\leq$  0.05), which is 30.7%. In the CG, the SI indicator increased from 597 to 625 units, which was 4.6% (p  $\geq$  0.05).

## Conclusions:

- 1. SI growth by 176 units. units (p  $\leq$  0.05) in the EG indicates that the effects produced with the "AkuTon" device improve the state of the pain control system and optimize the activity of physiological systems. This mechanism provides a faster and more stable regression of pain syndrome, as well as a pronounced general healing effect.
- 2. The device "Akuton" can be used in medical rehabilitation, in reflexology, manual therapy and massage rooms, in sanatoriums and other medical and preventive centers.

Shusharjan, R.S. Analgesic, psychotherapeutic and health-improving effects of music-reflexotherapy, carried out by the innovative device "AkuTon" / R.S. Shusharjan, N.I. Eremina, G.O. Samsonova // XXI International Conference "Theoretical and Clinical Aspects of the Application of Bioresonance and Multiresonance Therapy". - M .: IMEDIS, 2015 .-- S. 114-116.

To favorites