Mechanisms of anti-aging effects of music therapy by meso-forte technology S.V. Shusharjan

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Music therapy (MT), which today includes dozens of different methods and technologies using acoustic effects of the audible spectrum, is becoming more widespread in healthcare due to its proven effectiveness. Analysis of the literature and data from our own long-term studies indicate a variety of restorative and adaptive reactions arising in the human body as a result of musical and therapeutic influences, including neuroendocrine reactions (Grineva I.M., 1988; Zakharova N.N., Avdeev V.M., 1982; Haschec H., 1978, etc.).

Among the reliably identified therapeutic and recreational effects, it is necessary to highlight: psychotherapeutic, analgesic, hemodynamic, regenerative, etc. [1]. Of particular interest is the anti-aging (anti-aging) effect obtained when using innovative MT technologies, for example, meso-forte therapy.

Meso-forte therapy (MFT) is a breakthrough anti-aging technology, developed by us in 2009. The technique, equipment and software are protected by 5 patents [2, 4].

ITF is carried out using the hardware and software complex (APC) "Bonnie Grand", the software of which includes 38 special musical and acoustic programs with special algorithms. The same music is simultaneously delivered to the skin of the face, head area and reflexogenic zones through special technical devices, such as: a magnetic mask-converter, amplifiers, headphones. Additionally, during MPT, the skin is exposed to reparative cosmetics. One therapy session lasts 35-40 minutes. 10-15 procedures are assigned to the course.

An analysis of the use of MPT for five years in 257 persons of different sex and age with signs of progressive aging in the form of accelerated skin aging, increased wrinkles and a decrease in the reserve capacities of the body was carried out. As anti-aging therapy, these patients underwent a course of MTF of 10 procedures (2 procedures per week). Significant improvement after the use of MTF was found in 75% of cases, no worsening of the condition or intolerance to the procedures was found. At the same time, an increase in skin smoothness, an improvement in complexion against the background of stabilization of the psychoemotional state were recorded after the 1st visit. To objectify clinical data, modern research methods were used: laser Doppler flowmetry, computer dermatoscopy, enzyme-immunological determination of the level of hormones in the blood, valid psychological tests, etc. [2, 3]. When evaluating the long-term results of the course MFT, it was revealed that the achieved anti-aging effects persist for up to one year.

In the emergence of anti-aging effects of music therapy for meso-

Forte technologies an important role is played by the following mechanisms:

- 1. Listening to music programs with preset algorithms anti-stress character simulates a favorable psychosomatic background.
- 2. Against the background of anti-stress reactions, the level of hormones in the blood is optimized, vascular and muscle spasms are eliminated.
- 3. Contact sound effects on the skin and soft tissues allow significantly improve capillary blood circulation in subcutaneous vessels and activate the regenerative capabilities of cellular elements [2, 3, 4].
- 4. Substances of reparative cosmetics penetrate deeper into the skin under exposure to acoustic signals during ITF and enhance anti-aging effects.

In addition, the ability of the human brain to memorize melodies provides a long-term aftereffect of musical therapy programs.

The versatility of the positive influence of meso-forte therapy on the mental and physical condition of a person, accessibility and safety determine the increasing use of this technology in anti-aging and restorative medicine, as well as in cosmetology practice.

## Literature

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Shusharjan, S.V. Mechanisms of anti-aging effects of music therapy using meso-forte technology / S.V. Shusharjan // XXIII International Conference "Theoretical and Clinical Aspects of the Application of Bioresonance and Multiresonance Therapy". - M .: IMEDIS, 2017 .-- S.259-261.

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