

## **Voice as indicator of somato-vegetative dysfunction**

**Barabanov R.E.**

Federal Research Clinical Otolaryngology Centre of the Russian Federation Healthcare Ministry,  
Moscow, Russia

**Keywords:** voice disorder, vegetative dysfunction, psychosomatic, therapy biocontrolled.

**Resume.** Article is devoted to research of interrelation between disturbance of a voice and disorder of a vegetative nervous system. Psychosomatic aspects of diseases of the voice device are analyzed. The method of activation therapy providing rising of activity of nervous, endocrine, immune systems, activating adaptic opportunities of an organism and promoting restoration of a voice is offered.

### **Introduction**

The considerable the idea that creation of a uniform-voiced and speech system of functions of the person requires harmonious interaction of all complex of bodies and systems gained the development a time ago. At the same time steady body height of incidence of professional diseases of the voice device is noted.

The phonation is the composite act in which besides respiratory shares many other systems and, first of all, nervous. The modern ideas of an innervation of a throat developed on the basis of the numerous clinical and pilot studies which allowed to obtain a reliable data about morphology of its receptor and effector nervous structures. From research and development it is known that VNS actively participates in providing a trophic condition of building blocks of a throat [3].

According to a number of scientific researches [3], with the functional violations of a voice the vegetative dysfunction capable to become the reason of the functional failure of diencephalic area, intimately by the bound to laryngeal nerves and defining a voice timbre is diagnosed for most of patients.

On the other hand, instability of vegetative balance it becomes frequent the main reason for various pathologies of the voice device. Besides, transition of the functional changes of a voice to organic educations – slug, polyps of voice folds, xp is often observed. laryngitis.

Let's note also that at pharynx pathology, voice frustration of both an organic, and functional genesis a number of researchers recognizes an important role of methods of correction of vegetative dysfunction. So, in the course of studying of features of vegetative dysfunction by means of a method of spectral researches of variability of a rhythm of heart (VSR),

neurophysiologists revealed a so-called power scarce condition of patients which distinctiveness is decrease in effectiveness of traditional treatment and frequent recurrence.

Character of life of the modern person, his practical withdrawal from an environment of accommodation and the arising problematical character of natural recovery of health, promote strengthening of influence of stressor impact on wellbeing of the person in general. Under the continuous influence of a stress serviceability considerably goes down, physical condition worsens, the probability of adoption of the improper decisions increases, creation of conflict situations is provoked [5]. Ability to resist to a stress can be considered as a key condition of both physical, and mental health. This ability influences also the common level of activity of the person, and his ability to make adequate decisions in the conditions of time limit that it is so characteristic of the modern megalopolis.

During SRW at research VNS approximately at 55% of respondents the expressed easing of activity of the sympathetic center, at 16% decrease of the vasculomotor center was revealed. Moderate dominated sympathetic nervous system showed 11% of patients. At the same time the analysis of a kardiointervalometriya revealed presence at 77% of patients of vegetative dysfunctions, at 25% - vegetative dystonia. The received results showed tension of compensatory and adaptive regulatory mechanisms.

### **The purpose of the study**

In view of the fact that in the presence of VNS dysfunction steadier functional violations of a voice and organic diseases were found by us in the patients who are professionals of a voice that became the reason of deterioration of their professional activity we set a goal of searching of new ways of correction of an emotional pressure, and also individual antistressor prophylaxis.

### **The materials and methods**

The similar comprehensive approach means use in treatment of diseases of internals of various methods of psychotherapeutic influence for medicine. The method of game biomanagement (the modern computer medical and improving technology) created by the principle of the biological feed-back (BFB) which essence is that the recorded physiological parameters of the patient are displayed on the screen is especially distinguished from such methods and are a certain game competitive plot [1]. Influence is biological a feed-back for correction and treatment of violation of a voice were already considered by other experts. We estimated effectiveness of use at professionals of a voice of a method of game biomanagement.

### **The results of the study**

The analysis of biological processes of a human body and its psychophysiological states shows a huge significance of respiration in the course of life support of human activity.

From the medical point of view, the level of health is in many respects caused by activity of reactions of adaptation, range, a range of adaptable mechanisms, quality of reactions of antistressorny protection [5]. As showed opening of the Russian scientists of the Rostov research oncological institute, a human body, being uniform system, sensitively reacts not only to stressful irritants, but also to a wide range of very small influences.

As the answer to weak irritants, in an organism there are adaptation reactions of activation and training in which all systems of an organism are gradually involved (nervous, endocrine, immune) and, respectively, degree of resistance of an organism changes [2]. The normal state of health and a high level of resistance of an organism are caused by balance of harmonious, not intense reactions of activation or training by means of slight attachments.

Thus, the regular training can be considered as rather available method of activation therapy, providing increase of activity of nervous, endocrine, immune systems, activating adaptation opportunities of an organism. Proceeding from the above, the respiratory gymnastics can be considered as the universal and efficient instrument of rehabilitation and prophylaxis by means of which the perhaps considerable improvement a state of health at various diseases, in particular, and also strengthening of adaptation opportunities of an organism, strengthening of immunity and increase of level of an antistressorny reactivity.

### **Conclusion**

In conclusion we will note that poor study and ambiguity of an etiopathogenesis of voice frustration, low effectiveness of the existing methods of treatment causes need of development of new research approaches to diagnostics and treatment of patients taking into account their common condition and methods of correction of vegetative nervous system. Presence of similar pathology at the patients having owing to the professional accessory, high voice loading conducts to risk of development of the functional, and further and organic violations of a voice.

### **References**

1. Biomanagement – 3; Theory and practice. An edition of the academician of the Russian Academy of Medical Science M. B. Stark (Russia), doctor M Schwartz (USA) – Novosibirsk; TsERIS. 1998. – 300 pages.
2. Biomanagement – 4; Theory and practice. An edition of the academician of the Russian Academy of Medical Science M. B. Stark (Russia), doctor M Schwartz (USA) – Novosibirsk; TsERIS. 2002. – 350 pages.
3. Vane A.M. Vegetative frustration: Clinic, diagnostics, treatment./Under the editorship of A.M. Vane. – M.: LLC Medical News Agency, 2003. – 752 pages.

4. Antipova O. S. Interrelation of vegetative regulation with the level of uneasiness and depression, nature of communicative behavioural reactions and with mechanisms of psychological protection of patients with bronchial asthma.//Topical issues of psychiatry, narcology and medical psychology. Release 6. Voronezh: Prod. Cossack farm «Murom». – 2004. with 16 – 19.
5. Berezin F.B. Mental adaptation and alarm. Mental and psychophysiological adaptation of the person. L., 1988 pages 13-21.
6. Christmas E.A. Anxiety and a rigidnost in structure of the identity of patients with neurotic frustration.//Questions of neuropathology and psychiatry. 1987, No. 7, t. LXXXVII, page 1095.
7. Maklakov A.G. General psychology. – SPb.: St. Petersburg, 2001. – 592 pages.