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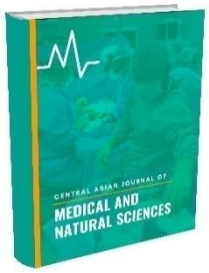

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The Effectiveness of the Benevron BF Drug in the Treatment of Patients with Sensoneural Stiffness

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Abstract: The role of hearing in a person's life is considered very important. Hearing loss is given to most of us at birth and is a necessary factor for normal speech and intellectual development, communication and education, so hearing loss or loss is an urgent medical and social problem. Official medical statistics show that about 5% of the world's population is deprived of hearing or complete hearing, and the number of people with it is increasing every year. Neurotropic therapy is used for patients with sensoneural stiffness in order to minimize the harmful effects of causal factors in the development of the pathological process, improve metabolic processes, restore functional activity and restore tissues, including neuroepithelium - B vitamins. Preparations containing a complex of vitamins B1, B2, B6, and B12. One of these multivitamin drugs is Benevron BF.

Key words: sensoneural stiffness, syndrome, thiamine (B1), pyridoxine (B6), riboflavin (B2), itamin (B9), tsiankobalamin (B12), Benevron BF.

Introduction. 466 million of the world's population (432 million adults and 34 million children) - lost hearing. It is estimated that by 2050 more than 900 million people will suffer from hearing loss. Hearing loss in a healthy ear is detected when it exceeds 40 dB in adults and 30 dB in children. Most of these people live in low-and middle-income countries. For each age group, a decrease in hearing ability leads to specific negative consequences, such as a decrease in educational potential, direct communication problems, financial losses, cognitive impairment, and a general decrease in quality of life. Hearing loss is a more serious problem than usual, which affects almost all aspects of Life [3, 7, 11]. The most common disease that leads to hearing loss is sensoneural stiffness. Sensoneural stiffness (auditory nerve neuritis) is a complex disease that involves damage to anatomical structures ranging from the inner ear spiral (Cortiyev) organ to the auditory centers located in the cerebral pustleus. [11].

Most often, this disease is observed in people of working age, more often in men. In this disease, hearing loss may have the following degrees in accordance with the International Classification:I 26-40

II 41-55

III 56-70

IV 71-90

Deafness ≥9

1The degree of hardness in such cases was assessed by the average value of the Air hearing limits at frequencies of 500, 1000, 2000 and 4000 Hz (dB). [7, 8].

The reasons for the origin of sensoneural stiffness are different. The cause of congenital sensorneural stiffness is often associated with hereditary pathology (with and without syndrome). With the development of genetics and the expansion of genetic analysis possibilities, sensoneural stiffness and deafness were found to account for 68% of hereditary congenital ear diseases. Among the forms without syndrome, the most common are autosomal recessive. Syndromic hearing disorders caused by progeny without Autosomal recessive are Pendred syndrome (congenital sensoneural stiffness and goiter) and Usher Syndrome (congenital sensoneural deafness and retinitis). Examples of autosomal dominant auditory syndrome disorders are Stickler syndrome and Waardenburg (Wardenburg) syndromes. One other reason is the transmission of chlamydia infection from the mother during childbirth in newborns. Infection congenital rubella syndrome, manifested in the form of Greg's triad (sensoneural deafness, congenital heart defects, severe eye diseases). In addition, hearing disorders develop in more than 64% of children born to pregnant mothers who suffer from alcoholism. In this, alkagol has an ototoxic effect on the development of the fetus, affecting the loss of hearing ability. Birth before the deadline, on the other hand, leads to sensorineural deafness in about 5% of cases. Syphilis-1/3 of infected children may later develop sensoneural stiffness. [5]. The causes of sensoneural stiffness and deafness disorders that develop throughout life can be: acoustic and mechanical damage (especially noise that acts together with vibration); ototoxic drugs (aminoglycoside antibiotics, diuretics (ethyrinic acid and furosemide), antimetabolites (methotrexate), salicylates (acetylsalicylic acid), drugs used in the treatment of cancer, industrial risk (works primarily with high noise levels); viral infections: tepki (mumps), measles, rubella, herpes, influenza and other viruses; diseases of bacterial etiology: scarlet fever, syphilis; inflammatory diseases: purulent labyrinthitis, meningitis; autoimmune and allergic diseases; otosclerosis; old age, etc. [6-8].

The likelihood of hearing loss increases with age. Therefore, almost 1/3 of people of retirement age should use hearing aids. But hearing loss or loss of hearing is not only a problem for older people, it can also be observed in middle-aged people. People aged 25-45 who live in metropolitan areas and large cities with high noise levels also experience problems such as reduced hearing capacity. Usually, a person should feel the noise up to 20-30 dB (natural noise). In most metropolitan areas, the background noise level reaches 50-60 dB (sound pressure level), for example,on large highways, the noise is about 70 dB. Therefore, even if a person does not feel the effect of this noise on himself, over time it can affect his health. [9]. The absence of uniform etiopathogenesis leads to the absence of standards in the treatment of sensoneural stiffness, taking into account the multifactorial nature of pathological processes in diseases of the auditory analyzer [1, 2, 8]. Therefore, in the current period, the treatment plan for sensonebral stiffness includes drugs aimed at different directions in the pathogenesis of its development. Metabolic disorders under the influence of various etiological factors, including angio-neurotic changes, lead to a violation of the supply of oxygen to the auditory analyzer, which makes hypoxia especially sensitive to Cochlear receptors [8].

The treatment of patients with sensoneural stiffness, despite the general progress in the development of medicine, still remains a problem that has not been resolved. The effectiveness of the treatment of acute sensoneural stiffness (up to 1 month) alone has been proven through the use of hormones. The indications for the effectiveness of the treatment of chronic sensoneural stiffness are much simpler, which does not negate the need for treatment in many cases. The lack of effectiveness of the use of this

or that drug from the point of view of evidence medicine (complex multi-stage studies are carried out for a long time and in some cases have objective difficulties) does not mean that they cannot help with a particular disease. Treatment of patients in this group is currently a difficult task, so new methods of treating sensoneural stiffness should be sought [9]. Taking into account the peculiarities of the disease, drugs are used that improve the blood supply to the inner ear, hemodynamics of the cerebral hemispheres and rheological properties of blood, which have an antigypoxant orientation due to the activation and stimulation of biosynthesis of Bioenergetic processes in the mitochondria. In the complex treatment of any form of sensoneural stiffness, there should be drugs that improve and enhance the regenerative processes in the neuroepithelia[4, 6, 7, 11, 14].

Numerous scientific studies carried out in Uzbekistan and abroad, in our SamTI clinic, prove that from the first day of hospitalization of a patient with acute hearing loss, infusion therapy with vasoactive and antigypoxic agents is possible. In intravenous drip, drugs such as cavinton, pentoxifylline, serebrolizin, piracetam are used parenterally for the first 10 days, thus gradually increasing the dose of the drug from 1 to 4 days, and infusion therapy from 5 to 10 days maintains a constant therapeutic dose. Later, they switch to intramuscular and oral medications [7].

Neurotropic vitamins were used in treatment only traditionally or in combination with other drugs. Vitamins of Group B (mainly B1, B6 and B12) have become part of the arsenal of drugs that are practically used in the treatment of patients with sensoneural stiffness of various origins. The drug Benevron BF is vitamin B1, B2, B6, B9, B12 in the form of tablets, dragees and Solution [3, 4, 11, 13].

Thiamine (B1) plays an important role in protein, fat and carbohydrate metabolism, participates in the repair of damaged nerve fibers and has antioxidant activity. Due to its lipophilic structure, one of the forms of thiamine benfogamma easily penetrates the hematolabirintogen barrier and enhances energy exchange in nerve fibers, while pyridoxine improves synaptic transmission of impulses to the upper parts of the auditory analyzer [10, 12, 14-16].

Benfogamma is stable in an acidic environment and is not destroyed by thiaminases in the intestine, which makes it possible to achieve the maximum effect when used. The biological activity of 40 mg of benfogamma is higher than 100 mg of thiamine, and the amount of thiamine in erythrocytes as a result of taking benfogamma is 3 times higher than taking water-soluble thiamine.

Riboflavin (B2) Riboflavin controls redox processes, participates in protein, fat and carbohydrate metabolism, plays an important role in DNA formation, participates in the synthesis of hemoglobin, promotes tissue regeneration.

Pyridoxine (B6) is a component necessary for the normal functioning of the peripheral and central nervous system. Acts as a coenzyme of enzymes that affect nerve tissue. It plays an important role in histamine metabolism, promotes the normalization of lipid metabolism and also has antioxidant activity. **Itamin (B9)** to'qimalarning o'sishi, rivojlanishi va ko'payishi jarayonlarining normal o'tishi uchun, xususan, gemopoez va embriogenez uchun zarur bo'lib, aqliy va jismoniy ko'rsatkichlarni oshiradi.

Cyanocobalamin (B12) is an important component of the drug, it has a beneficial effect on the maturation of red blood cells and blood formation. Participates in a number of biochemical reactions that provide vital activity in the human body. Processes in the nervous system affect the lipid composition of phospholipids and cerebrosides. In addition, vitamin B12 is involved in the most important biochemical processes of myelination of nerve fibers [15].

Purpose of the study

Improving the quality and effectiveness of treatment of patients with sensoneural stiffness by determining the necessary criteria, indications and appropriate approaches to conservative yul treatment based on a comprehensive analysis of the results of treatment in modern conditions**.**

Inspection methods and materials: The treatment process of 26 patients with sensoneural stiffness treated in the private ENT clinic Sao-Med and in the ENT department of the Samarkand regional children's Multidisciplinary Medical Association was analyzed in the period from 2020 to 2021. The prevalence of patients with sensoneural stiffness has increased within all ear diseases over the years. The result of the studies showed that the proportion of infected men was 65.4% (17 people), infected women 34.6% (9 people) (of which 6 (23.1%) were those under 18 years of age).

Complaints, Anamnesis and objective data, results from further studies, and conservative treatments were analyzed across all selected disease histories, resulting in some of the patients complaining of unilateral hearing decline (38%). Important diagnostic data were found in the patient, such as noise in the infected ears, hissing sound, balance contagion status (69%), cuneiform and vomiting (64.3%), spontaneous gorizantal-rotator nystagm (48.5%), which is associated with a healthy side. And in the background, when the activity of the inner ear is partially impaired (at the initial stage of the disease or when labyrinth hemodynamics improves), complaints such as impaired activity of receiving loud sounds were noted in the patient.

From the medical history of patients, it should be noted that in most patients, the disease occurred for the first time (64%). The rest were re-treated with this disease. And this, in fact, indicates that otolaryngologists are often faced with the disease of sensoneural stiffness.

Sensoneural stiffness was found to be 22% congenital malformations after infective disorders in 21% patients, 31% after utkir middle otitis, 11% after coronary heart disease, 15% after dislocations, 21% after concomitant diseases.

As a result of an additional process of research, which mainly includes audiometry and battery tests, disease levels were determined.

The tactics of treatment in sensonebral stiffness were determined based on the etiopathogenesis of the disease, the clinical picture, the severity of the lesion kata is small and the age of the patients. Sensoneural stiffness is treated conservatively. In the treatment of the disease, drugs from the group of drugs below were used based on the condition and etiopathogenesis of the patient: drugs that improve cerebral circulation, metabolites, diuretics, glucocorticosteroids, hypotensive agents and other types of drugs were used. In order to improve the metabolism, we used the drug Benevron BF. When we took this drug, we observed that our patients ' condition improved faster than before compared to traditional treatment. Thanks to the stable mechanism of action of this drug, increased energy metabolism in nerve fibers, improved synaptic transmission of impulses to the upper parts of the auditory analyzer, and several other mechanisms of action, our healing process has significantly improved.

Conclusion. Given the polyethology of sensoneural stiffness, it is necessary that the treatment of this disease should be comprehensive and timely, one of the components of this treatment should be drugs that improve the regenerative processes in the neuroepithelium. Clinical studies and experience in the use of the drug Benevron BF have proven the feasibility of using these drugs in the treatment of patients with sensoneural stiffness of various etiopathogenesis.

In the course of treatment, 15 of the 26 patients we studied had recovery (57.7%) and the remaining 11 (42.3%) had improved hearing. The fact that this leads to a reduction in the healing process by up to 3 days and a better result by about 15% compared to traditional treatment has been proven by uz during our research. In the course of treatment, due to the improvement in Labyrinth hemodynamics, it was

observed that simtomas such as nystagm, balance disorders, nausea, headaches were eliminated more quickly in 9 patients (34.6%). Patients who receive traditional treatment, if they go to the doctor to receive treatment procedures 2-3 times a year, after our treatment procedures, 21 patients (81%) began to undergo treatment 1 time a year. This means that our research has worked well.

Nowadays, as a result of hearing decline caused by sensoneural stiffness, many people use hearing aids. Nevertheless, it is necessary to use drugs aimed at improving the permeability of the central nervous system, both at the stage of adaptation of hearing aids to humans and during long-term use. Drugs of Group "B", which are known to have a positive effect on the functioning of sensory systems, can be recommended for use in patients with different degrees of sensoneural stiffness, regardless of the use of hearing aids.

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