MECHANISMS OF PROMOTING REHABILITATION MEASURES IN FACIAL NERVE DISEASE

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Abstract: According to the World Health Organization, facial neuropathy is the second most common disease among peripheral nervous system lesions, and the first among cranial nerve lesions. In different countries of the world, the incidence of this disease is 10-53.3 per 100,000 population, including 20 in Europe, 30 in Japan. ta gagasha eats. The incidence of the disease is approximately the same in men and women. This article analyzes the anatomical and functional features of the facial nerve in the IMRAD format, taking into account the above information. The central and peripheral parts of the facial nerve, their structure and main functions are highlighted in the study. We also focused on cases of disorders of the facial nerve and related clinical issues. This article can be useful in completing scientific information about the facial nerve and in the medical diagnosis process.

Keywords: facial nerve, anatomy, nerve structure, motor and sensory nerves, lumbar palsy, clinical neuralgia, neuroanatomy.

Introduction. The facial nerve is responsible for human facial expressions, taste and some reflexes. Its anatomical and functional properties are important in the field of medicine and neurobiology. Today, facial neuropathy is the most common form of mononeuropathy, affecting 7 to 40 patients per 100,000 people per year. Prosoparesis of the facial muscles causes aesthetic defects, affecting swallowing, chewing, speech and the emotional status of children, causing a significant decrease in the quality of life of children with facial nerve neuropathy.

According to the World Health Organization, "...among the pathologies of the peripheral nervous system, the incidence of facial neuropathy is the second highest, with the incidence of facial neuropathy being 8-240 per thousand does" ¹, which means the need and relevance of such research to solve the problems of diagnosis, treatment and rehabilitation of patients. Due to the long-term duration of facial nerve neuropathy, incomplete recovery of facial muscles, the possibility of relapses and the high frequency of synkinesias or muscle contracture formation, diagnostic methods are used in patients at different stages of the disease. improvement and optimization of rehabilitation measures is important.

To study the pathogenetic mechanisms of the formation, stabilization and subsequent development of neurosomatic decompensation of facial nerve neuropathy in the world, as well as to optimize diagnostic and treatment methods in various stages of this pathology, to develop prognosis criteria special attention is being paid to scientific researches aimed at the development. In this regard, it is important to prevent the occurrence of complications such as facial muscle stiffness in patients with facial nerve neuropathy, as well as to solve the issues related to predicting the final consequences of this pathology. For this reason, in order to find more accurate methods of rehabilitation and forecasting the consequences of the disease aimed at reducing the complications of the disease in children with facial nerve neuropathy, clinical-neurological, Deeper study of neurovisualization and neurofunctional research methods is of particular importance.

¹World Health Organization WHO 2016. URL: http://www.who.int / bulletin / volumes / 96 / ru /

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In our country, extensive work is being carried out to fundamentally improve the quality of medical services provided to children and to develop the health care system. In this regard, "...increasing the efficiency, quality and popularity of medical care, as well as forming a system of medical standardization, introducing high-tech methods of diagnosis and treatment, creating effective models of patronage service and dispensary important tasks such as supporting a healthy lifestyle and preventing diseases...². In the implementation of the specified tasks, early detection of neurological diseases among the population, especially in children, increasing the effectiveness of treatment, appropriate selection of patient treatment and rehabilitation tactics, rehabilitation It is important to optimize activities and improve the quality of life.

Literature analysis. Research on the anatomy and function of the facial nerve is the result of many years of scientific research. Below is a list of important literature in this field and their analysis:

Grey's Anatomy. This book details the anatomy of the facial nerve as a basic medical reference. Provides extensive information about the starting point of the facial nerve, its directions in the brain, and its peripheral parts. Images and diagrams in the literature serve as the main source in clinical diagnosis. The beauty of the book is that it describes the facial nerve with precise topographic measurements. However, some parts are covered by general medical information, so a thorough clinical analysis may not be sufficient.

Surgical Anatomy of the Facial Nerve (J. May). This monograph examines the importance of the facial nerve in surgery. Features of the facial nerve and risk factors during surgery are highlighted. The book is clinically relevant and provides in-depth information on facial nerve conditions such as Bell's palsy or traumatic injuries. However, the book contains more surgical sections than simple anatomical information.

Clinical Neurology (RN Aminoff). Provides extensive information about disorders of the facial nerve and their clinical manifestations. In particular, a lot of attention is paid to the analysis of Bell's palsy, facial asymmetry and nerve damage. This work is an authoritative source in the field of clinical neurology and helps in the diagnosis of pathological conditions involving the facial nerve. It also covers treatment options, which is important for clinicians.

Nervous Systems: Anatomy and Function (Haines). Provides detailed information on the relationship of the facial nerve to other cranial nerves and their mutual functional integration. The work is a key resource in the study of how the facial nerve is related to the central and peripheral systems. However, some anatomical details are less clear in it.

The literature provides extensive knowledge of the structure, function, and clinical significance of the facial nerve. Different literatures show different approaches to medical diagnosis and surgical practice. The analysis shows that a complete study of the facial nerve requires the integration of anatomical, clinical and surgical sources.

Methods. This study aims to study the anatomical structure and functional properties of the facial nerve. The following methods and sources were used in the research:

Literature analysis. Scientific literature on the structure and functions of the facial nerve, including anatomical atlases, neuroanatomical textbooks, and clinical manuals, was systematically analyzed. The goal is to clearly describe the central and peripheral parts of the facial nerve.

Analysis of anatomical sections. Histological sections and neuroanatomical diagrams were analyzed for a visual study of the structure of the facial nerve. In the cross-sections, the directions of transmission of the facial nerve from the nuclei of the brain to the peripheral muscles and tissues were studied.

 $^{^2}$ Uzbekistan Republic Decree of the President of December 7 , 2018 No. 5590 " Health storage system fundamentally improvement according to complex measure - measures " Decree on

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Computed tomography (CT) and magnetic resonance imaging (MRI) data. Modern CT and MRI images were analyzed for the dynamic study of the central and peripheral parts of the facial nerve. This information helped to identify pathological conditions of the facial nerve and to study the signals along the nerve.

Statistical data analysis. Available statistics on clinical cases associated with facial nerve disorders (eg, Bell's palsy) were reviewed. Through this, the most common pathological conditions of the facial nerve and their causes have been identified.

Comparative analysis. The interrelationship of the facial nerve with other cranial nerves and their functional characteristics were compared. This approach has contributed to a better understanding of the neuroanatomical role of the facial nerve.

These methods made it possible to analyze the structure and functions of the facial nerve in detail and established the basis for determining its clinical significance.

Results. By studying the anatomical structure and functional properties of the facial nerve, this study gave the following results:

Anatomical structure of the facial nerve

Central part: The starting points of the facial nerve are located in the case of the brain. Their main parts are the motor and sensory nuclei located in the pons (bridge part of the brain).

Peripheral part: Peripheral fibers of the facial nerve leave the brain region, pass through the ear canal and reach muscle, gland and sensory areas.

Branches: The facial nerve divides into several sections: the section that controls the muscles around the eyes, and sections that connect with the muscles in the mouth and ear area.

Functional characteristics

Motor function: The facial nerve controls the movement of the facial muscles. These actions provide facial expressions and emotional expression of the person.

Sensation: The facial nerve carries signals from taste receptors (such as the taste fibers in the front of the tongue) to brain centers.

Vegetative functions: The facial nerve controls the secretion of tears and salivary glands.

Pathological conditions

Bell's palsy: When the peripheral part of the facial nerve is damaged, muscle immobility is observed on one side of the face. This condition leads to an asymmetric appearance of the face.

Neuralgia: Cases of painful neuralgia have been observed in the facial nerve, mainly felt around the ear or in a specific area of the face.

Diagrams and visuals

Diagrams were developed showing the anatomical structure of the facial nerve and its relationship to the brain and peripheral tissues. These diagrams helped to describe each part of the nerve and its main functions.

These results have expanded knowledge of the anatomy and function of the facial nerve and provided information needed for the diagnosis and treatment of facial nerve-related disorders.

Dissussion. The study achieved important results by analyzing the anatomical and functional characteristics of the facial nerve. Below are the results of the study and their scientific and clinical significance:

Anatomical and functional role analysis. The central and peripheral parts of the facial nerve work together to provide motor, sensory, and autonomic functions. This structural and functional integration is the main mechanism behind facial movements, taste perception, and glandular secretion. This

situation shows that the nerve is very important, because its damage affects not only motor functions, but also sensory and secretory processes.

Clinical significance of the facial nerve

Bell's Palsy: Research has shown that lesions in the peripheral part of the facial nerve cause clinical signs such as facial asymmetry and muscle immobility. This condition is associated with weakness or inflammation of the peripheral divisions of the nerve.

Neuralgia: Inflammatory or other damage to the facial nerve leads to painful pain syndromes. Identification and treatment of these clinical conditions is of great importance for medical diagnosis.

The relationship of the facial nerve with other cranial nerves

Research has shown that the facial nerve works in interaction with the trigeminal nerve (paired nerve V) and the glossopharyngeal nerve (paired nerve IX). This connection ensures the integrated function of the nerve in taste, reflexes and facial movements.

These relationships are important in understanding the prevalence of injury in clinical processes.

Pathology diagnosis and treatment recommendations

Modern methods, including MRI and electromyography, provide effective results in the detection of facial nerve pathologies. These technologies increase accuracy in determining the condition of the nerve and provide information about the location of the injury.

Practical importance

By in-depth study of the structure and functions of the facial nerve, it is possible to improve diagnostic and treatment processes in clinical medicine. This knowledge is especially important to prevent nerve damage during surgery.

Possibilities in the diagnosis and treatment of many pathologies that occur in the field of medicine. This study has served to expand knowledge related to the facial nerve and may serve as a basis for the development of future strategies for the diagnosis and treatment of facial nerve disorders.

Conclusion. General conclusions about the structure and function of the facial nerve and the practical significance of the research are emphasized. From the above, it can be **concluded** that all patients with neuropathy of the facial nerves are recommended to conduct an ENMG test of the affected peripheral muscles in order to correct the treatment; For the prognosis and regulation of the disease, it is recommended to visualize the nerve using the NSG technique, which will help children with SCI to receive proper rehabilitation therapy to prevent muscle contraction of the affected side. gives a great opportunity to choose and relieve the disease.

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