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## **EARLY CORRECTION OF NEUROLOGICAL DEFICIENCY IN FACE NEUROPATHY**

**Summary.** According to the WHO, Bell's palsy is the second most common type of mononeuropathy, second only to peripheral nervous system diseases.

Despite the large number of studies, not all features of the etiology, pathogenesis and course of the disease in childhood have been fully studied. The outcome of the disease in children is much better than in adults, according to various researchers, the number of complications can range from 5% to 50%.

The most common complications with a frequency of 25-30% include facial muscle contractures with prosoparesis of various severity, pathological synkinesis and dyskinesia.

**Keywords:** facial nerve, facial nerve neuropathy, secondary contracture of facial muscles, corneal reflex of the eye muscle, latent period, exteceptive suppression.

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## **РАННЯЯ КОРРЕКЦИЯ НЕВРОЛОГИЧЕСКОГО ДЕФИЦИТА ПРИ НЕЙРОПАТИИ ЛИЦА**

**Резюме.** По данным ВОЗ, паралич Белла является вторым наиболее распространенным типом мононейропатии, уступая только заболеваниям периферической нервной системы.

Несмотря на большое количество исследований, не все особенности этиологии, патогенеза и течения заболевания в детском возрасте до конца изучены. Исход заболевания у детей значительно лучше, чем у взрослых, по данным разных исследователей, количество осложнений может колебаться от 5% до 50%.

К наиболее частым осложнениям с частотой 25-30% относятся контрактуры мимических мышц с прозопарезом различной степени выраженности, патологические синкинезии и дискинезии.

**Ключевые слова:** лицевой нерв, невропатия лицевого нерва, вторичная контрактура мимических мышц, роговичный рефлекс глазной мышцы, латентный период, экстремитивное угнетение.

**Relevance.** Facial nerve neuropathy in children is the most common disease of the peripheral nervous system. UNN accounts for up to 90% of all mononeuropathies in children and differs in etiology and age-related polymorphism.

Facial nerve neuropathy is a very topical pathology of the peripheral nervous system today. The number of people suffering from this disease is constantly growing. The frequency of facial nerve neuropathy, for example, is 20 cases in European countries and 30 cases per 100,000 population in Japan. According to the WHO, the most common type is facial nerve mononeuropathy, which ranks 2nd among diseases of the peripheral nervous system. In different countries of the world, disease intervals are observed in 8-240 cases per 100,000 population.

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outcome of the disease in children is much better than in adults, according to various researchers, the number of complications can range from 5% to 50%).

Acute facial nerve injury is manifested by unilateral paralysis or paresis of the facial muscles, which is associated with damage to the intracranial portion of the facial nerve root or a violation of anatomical integrity. Insufficient function of facial muscles leads to closure of the eyelids, impaired articulation, difficulty eating, which significantly reduces the quality of life of this category of patients.

**Purpose of the study.** Development of methods for early correction of neurological deficits in facial nerve neuropathy.

**Materials and research methods.** Based on the analysis of medical histories and outpatient cards of 50 patients treated with a diagnosis of "facial nerve neuropathy" in the neurology department of the Andijan Regional Children's Multidisciplinary Medical Center.

All patients underwent clinical-neurological examination and detailed analysis of anamnestic data. They were examined when necessary by an ophthalmologist (to assess the fundus of the eye) and an otolaryngologist (as an exception to the inflammatory process in the ear and nasal sinuses).

Clinical and biochemical blood tests, general urine analysis were performed on all patients admitted to the Department of Pediatric Neurology.

The neurological examination included the detection of all cranial nerve functions, mostly signs of damage to the trigeminal and facial nerves.

Using solutions to detect sweet, sour, and salty tastes, the taste was assessed by dripping the solution into the front two-thirds of the tongue using a pipette using the drip method. For this purpose, 10% sugar solution, 15% salt solution, 50% citric acid solution were used.

The study of neurological status also included the detection of tendon and periosteal reflexes, sensitivity, muscle tone, coordination test, meningeal and pyramidal (pathological) tests.

To assess the severity of prosoparesis, K.M. The classification proposed by Rosler (1995) was used.

**Research results.** A study was conducted in 50 patients under 18 years of age with facial nerve neuropathy.

In order to examine the age distribution of facial nerve neuropathy, 4 age groups were identified. In particular, it was observed in 44% of boys and 56% of girls.

One of the tasks of the scientific examination was a clinical-neurological examination of the course of facial nerve neuropathy at different levels. For this purpose, the study of lesions of facial nerve neuropathy at different levels revealed the following: high damage in the fallopian tube from the network of the coronary nerve (n.petrosus superfisialis major) 8%, 12% above the sciatic nerve (n.stapedius), 18% above the chord tympanic network, below the foramen stylomasteideum area was observed in 62% of cases.

Thus, only 34% of patients sought medical attention in the first 72 hours after the onset of the disease and were admitted to the neurology department. The majority of patients (66%) were hospitalized much later (between 4–7 days) due to the fact that their parents did not take the disease seriously, their place of residence was far from the medical institution, and several other reasons.

According to our observations, 12 patients (20%) with idiopathic UNN developed acute respiratory disease, with 2 patients presenting with symptoms of respiratory disease from day 1 to day 7, often with mild catarrhal symptoms, with subfebrile rise in body temperature (37.5 - 38.5 S). One week before the development of UNN, acute respiratory illness was diagnosed in 6 children and 4 weeks in 4 children.

Risk factors for the development of idiopathic UNN were identified in 30 patients (60%) under the influence of cold, 3 (6%) under the influence of psycho-emotional stress between the ages of 11, 15 and 16, and 5 (10%) in healthy.

Due to the high level of risk factors for colds and acute respiratory diseases, the seasonality of UNN is as follows: in winter - 10 (20%), in spring - 9 (18%), in summer - 11 (22%), in autumn - 20 (40%) patients applied.

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**Output.** In order to examine the age distribution of facial nerve neuropathy, 4 age groups were identified. In particular, it was observed in 44% of boys and 56% of girls. The gender distribution among isolated patients was as follows: boys (22%) and girls (28%). The study of facial nerve neuropathy at different levels revealed the following: high damage within the fallopian tube from the network of the coronary nerve (n.petrosus superficialis major) 8%, above the sciatic nerve (n.stapedius) 12%, above the chord tympani network 18%, foramen stem below the field was observed in 62% of cases. When analyzing the duration of medical care for children with facial nerve neuropathy, only 34% of patients sought medical care in the first 72 hours after the onset of the disease and were admitted to the neurology department. The majority of patients (66%) were hospitalized much later (between 4–7 days) due to the fact that their parents did not take the disease seriously, their place of residence was far from the medical institution, and several

other reasons. When assessing the severity of prosoparesis: grade II prosoparesis was observed in 6 patients (12%), grade III prosoparesis in 40 patients (80%), and grade IV paresis in 4 patients (8%). When a self-assessment scale developed by Ch.D. Spielberger and Yu.L. Hanin was used to determine the level of reactive and personal anxiety, in a group of adolescents with UNN, especially 12–13-year-olds, reactive anxiety was measured as a person's response to stress. ranked high.

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