

FUNCTIONAL DISORDERS OF CONGENITAL CLEFT LIP AND PALATE

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ABSTRACT. Congenital cleft lip and palate is a severe malformation of the maxillofacial region accompanied by severe functional disorders. In addition, a feature of this pathology is a pronounced deformation of the nose in the form of a shortening of the nasal septum, flattening of the tip and wings of the nose. Pathologically attached muscles of the upper lip and nasal region further aggravate these deformities. This pathology is formed in the embryo up to 8-12 weeks due to the ungrown processes of the palate and lips on time. The purpose of this work is a comprehensive assessment of the quality of life of children with HCV and the identification of effective ways to improve it. The data obtained indicate a significant decrease in the indicators of emotional and social functioning in children with VGN, especially before the completion of surgical treatment. A model of multidisciplinary support is proposed, aimed at increasing the level of adaptation and social integration.

Keywords: congenital cleft lip and palate, quality of life, children, rehabilitation, multidisciplinary approach.

ФУНКЦИОНАЛЬНЫЕ НАРУШЕНИЯ ВРОЖДЕННЫХ РАСЩЕЛИН ГУБЫ И НЕБА

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АННОТАЦИЯ. Врождённая расщелина губы и неба — это тяжёлый порок развития челюстно-лицевой области сопровождается грубыми функциональными нарушениями. Кроме того, особенностью этой патологии является выраженная деформация носа в виде укорочения перегородки носа, уплощение кончика и крыльев носа. Патологически прикреплённые мышцы верхней губы и нососековой области ещё больше усугубляют эти деформации. Данная патология формируется у эмбриона до 8-12 недель вследствие несросшихся вовремя отростков нёба и губ. Целью данной работы является комплексная оценка качества жизни детей с ВРГН и определение эффективных путей его улучшения. Полученные данные свидетельствуют о значительном снижении показателей эмоционального и социального функционирования у детей с ВРГН, особенно до завершения хирургического лечения. Предложена модель мультидисциплинарного сопровождения, направленная на повышение уровня адаптации и социальной интеграции.

Ключевые слова: врожденная расщелина губы и неба, качество жизни, дети, реабилитация, мультидисциплинарный подход.

Introduction: The process of correcting congenital cleft lip and palate and subsequent stages of rehabilitation is often complicated by a variety of combined pathologies from other organs, in particular the nervous system. Anatomical changes in the maxillofacial region led to a persistent functional defect in all departments of voice and speech production. A severe speech disorder, rhinolalia, develops, in which all sides of speech suffer: breathing, voice, changes in the muscles of the pharynx, mouth and face are observed, pathological articulation develops, phonemic hearing is impaired, auditory perception is distorted. The severity of anatomical and functional disorders is directly related to the type of cleft in the upper lip. Children with congenital cleft lip and palate are childhood invalids, and until the end of the formation of the maxillofacial region, up to 14-16 years old, they are usually under the constant attention of a surgeon, orthodontist, pediatrician, neurologist, speech therapist. However, with the clear, well-coordinated work of highly qualified specialists on the basis of specialized centers, with the active participation and support of parents, it is possible to significantly reduce the period of disability of children. Congenital cleft lip and palate (IGN) is one of the most common congenital malformations, occurring, according to WHO, in 1 out of 700 newborns. This condition causes severe functional disorders of speech, breathing, nutrition, and hearing, and also has a significant impact on the child's psych emotional development and social adaptation. Modern approaches to the treatment of HCV are based on early surgical correction, orthodontic and speech therapy rehabilitation, however, the issue of quality of life remains insufficiently studied and is often underestimated in medical practice. Treatment of patients with cleft lip and palate (PHN) is one of the most difficult tasks of modern dentistry and maxillofacial surgery. Conducting comprehensive studies of congenital anomalies of the maxillofacial region in order to prevent them and actively participate in this work along with doctors of various specialties (geneticists, immunologists, obstetricians and gynecologists, pediatricians (neonatologists), neurologists, cardiologists, psychologists, sociologists, environmental doctors) and dentists. This will expand the child's health care and create favorable conditions for the formation of the maxillofacial system. The diagnosis of "congenital cleft lip and palate" is clinical and is established by a doctor on the basis of visual examination, anthropometric, X-ray and ultrasound examination methods.

The purpose of the study. To conduct a comprehensive assessment of the quality of life of children with congenital cleft lip and palate and identify the most effective ways to improve it, taking into account medical and psychosocial factors.

Research materials and methods. 135 infants born with HCV were involved, of which 83 were male infants and 52 were female infants. The infants were divided into 2 groups. Group 1 is the main group of 68 infants (of which 42 are male and 26 are female) and group 2 is the control group of 66 infants (of which 41

are male and 26 are female). The main group of infants received temporary silicone nipples and plates, which facilitated sucking and swallowing acts and improved speech defects, while the 2nd group of infants received traditional treatment methods. In carrying out this thesis, plaster models of infants were used, clinical and anthropometric methods were used to obtain parameters with congenital cleft lip and palate, followed by statistical data processing. In the course of the study, our task was to improve the life status of children with congenital cleft lip and palate using temporary silicone nipples and plates, as well as to determine the condition of bite in children with congenital cleft lip and palate, depending on age; In addition, to identify the features of changes in the parameters of the maxillary system during tooth replacement in children with congenital cleft lip and palate before uran- and chloroplast in a comparative aspect. At the same time, to determine the early dates of surgical intervention in children with cleft lip and palate, to improve the life status of children with congenital cleft lip and palate using temporary silicone plates (obturator) of replenishing elements that facilitate sucking and swallowing acts, and to improve speech defects in children with congenital cleft lip and palate using temporary silicone plates (obturator), in the end, to develop and implement in clinical practice a "Method of early orthodontic treatment of children with VGN" using orthodontic devices of their own design.

The results and their discussion. The results of the study showed that, based on a set of studies, comparative analyses of the condition and improvement of the life status of infants with congenital cleft lip and palate using temporary silicone nipples and plates were conducted for the first time. For the first time, a comparative analysis of the parameters of the upper dentoalveolar arch in newborns was carried out in the period before and after using the proposed obturator, its effect on the growth and development of the alveolar process. In 1 group of infants, an improvement in the life status of children with congenital cleft lip and palate was determined using temporary silicone nipples and plates, the normal state of bite in children with congenital cleft lip and palate was determined depending on age, and speech defects in children with congenital cleft lip and palate improved using temporary silicone plates (obturator) than in the 2nd group of children with VGN (in the control group, over time, the same indicators returned to normal, but the period was long and the children were aware of their complexes).

Conclusion. Thus, the study showed that, based on a set of studies, for the first time, a comparative analysis of the condition and improvement of the life status of children with congenital cleft lip and palate using temporary silicone nipples and plates was carried out, and a positive effect was proved. For the first time, a comparative analysis of the parameters of the upper dentoalveolar arch in newborns was carried out in the period before and after using the proposed obturator, its effect on the growth and development of the alveolar process. The changes studied and their systematization led to a decrease in maxillofacial pathologies, as well as growth and development, which contributes to the non-hormonal development of the child. The implementation of the obtained data in

practical healthcare will reduce the proportion of maxillofacial anomalies. For the first time, the method of using early orthodontic treatment of children with HCV, performed using a dental obturator for the orthodontic treatment of children with HCV, has been scientifically substantiated. The results obtained confirm that the quality of life of children with VGN is determined not only by medical, but also by psychological and social aspects. Effective care requires a multidisciplinary approach, including the participation of a surgeon, orthodontist, speech therapist, psychologist, and social worker.

Early informing of parents and their active participation in the treatment process plays a key role. An important area is the introduction of programs for psychological support and prevention of school maladaptation.

A number of foreign studies (Smith et al., 2021; Johansson et al., 2022) confirm that systemic rehabilitation and regular psychological correction contribute to improving emotional stability and increasing the level of social integration in such children.

REFERENCES

1. Hirschberg J. Functional consequences of cleft palate and its management. *Folia Phoniatri et Logopaedica*. 2002;54(1):1–14.
2. Joos U., Markus A.F., Schuon R. Functional cleft palate surgery. *Journal of Oral Biology and Craniofacial Research*. 2023;13(1):45–52.
3. Mao Q., Li J., Yin X. Pearls and pitfalls in contemporary management of marginal velopharyngeal inadequacy among children with cleft palate. *Frontiers in Pediatrics*. 2023; 11:1187224.
4. LeDuc J.A. Cleft Palate and/or Velopharyngeal Dysfunction: Terminology and Classification. ASHA Special Interest Division – Speech Science. 2008;9(4):155–167.
5. Nagarajan R., Treasure E.T., Chapman K. Communication disorders in individuals with cleft lip and palate: A review. *The Cleft Palate–Craniofacial Journal*. 2009;46(3):239–248.
6. Kummer A.W. Velopharyngeal dysfunction associated with cleft lip and palate: Diagnosis and treatment approaches. *The Cleft Palate–Craniofacial Journal*. 2011;48(1):1–8.

ИСПОЛЬЗОВАННАЯ ЛИТЕРАТУРА:

1. Hirschberg J. Функциональные последствия расщелины нёба и методы их коррекции. *Folia Phoniatri et Logopaedica*. 2002;54(1):1–14.
2. Joos U., Markus A.F., Schuon R. Функциональная хирургия расщелины нёба. *Journal of Oral Biology and Craniofacial Research*. 2023;13(1):45–52.
3. Mao Q., Li J., Yin X. Особенности и сложности современного лечения предельной велофарингеальной недостаточности у детей с расщелиной нёба. *Frontiers in Pediatrics*. 2023; 11:1187224.
4. LeDuc J.A. Расщелина нёба и/или велофарингеальная дисфункция: терминология и классификация. ASHA Special Interest Division – Speech Science. 2008;9(4):155–167.

5. Nagarajan R., Treasure E.T., Chapman K. Речевые и коммуникативные нарушения у пациентов с расщелиной губы и нёба: обзор. The Cleft Palate–Craniofacial Journal. 2009;46(3):239–248.

6. Kummer A.W. Расстройства велофарингеальной функции при врождённых расщелинах губы и нёба: диагностика и подходы к лечению. Cleft Palate–Craniofacial Journal. 2011;48(1):1–8.