International Journal of Health Systems and Medical Science

ISSN: 2833-7433 Volume 1 | No 4 | Oct-2022



Peculiarities of Orthodontic Preparation for Surgery in Children with Congenital Cleft Lip and Palate

Kamolova Feruza Rahmatilloyevna ¹, Abdullaev Kudrat Ergash uglu ²

Relevance: Congenital cleft lip and palate (CCLP) in combination with other defects is one of the causes of perinatal mortality and comes out on top in the structure of childhood morbidity and disability, representing not only a medical but also an important social problem. According to many authors, the number of children with this pathology is constantly increasing and in the next decade the frequency of such cases will be 2 times higher than 100 years ago. The very birth of a child with visible disorders is a severe socio-psychological trauma for parents. The complete completion of the medical rehabilitation of patients with congenital cleft lip and palate (CCLP) remains one of the most important problems in healthcare. Despite significant progress in the complex surgical and orthodontic treatment and medical rehabilitation of patients with unilateral CCLP, a number of problems in their treatment remain relevant to this day

Introduction. Congenital cleft lip and palate (CCLP) in combination with other malformations is one of the causes of perinatal mortality and comes out on top in the structure of childhood morbidity and disability, representing not only a medical but also an important social problem. According to many authors, the number of children with this pathology is constantly increasing and in the next decade the frequency of such cases will be 2 times higher than 100 years ago. The very birth of a child with visible disorders is a severe socio-psychological trauma for parents.

Complete completion of medical rehabilitation of patients with congenital cleft lip and palate (CCLP) remains one of the most important problems in healthcare. Among patients with congenital malformations of the face, they account for up to 90% [1]. The problem of completing the medical rehabilitation of patients in this category is not limited to the period of childhood. Despite significant progress in the complex surgical and orthodontic treatment and medical rehabilitation of patients with unilateral CCLP, a number of problems in their treatment remain relevant to this day. According to some authors, about 80% of adult patients with CCLP need corrective facial surgery. The natural shape, symmetry of the upper lip and nose, their aesthetic appeal, the participation of facial muscles in facial expressions, the performance of a number of functions are primarily due to the anatomically correct position of the cartilage of the nose and the muscles of the nasolabial region. Deformation of the thresholds of the nasal passages, flattening of the tip and wings of the nose, cicatricial deformity of the upper lip and arch of the vestibule of the mouth, a slit-like defect of the alveolar process are typical signs of residual and secondary deformities of the middle zone of the face after surgical treatment of CCLP.

In this regard, the improvement of medical rehabilitation of children with congenital cleft lip and palate is still relevant and in demand. To provide qualified assistance to this group of complex patients, multi-stage surgical interventions and constant monitoring by an orthodontist, pediatrician, speech therapist and other specialists are required. Complete medical, psychological and social



¹, Head of the Department of Pediatric Dentistry of the Bukhara State Medical Institute, Doctor of Medical Sciences, Professor

², Master of the Department of Pediatric Dentistry, Bukhara State Medical Institute

adaptation of the child depends on anatomical, functional and cosmetic disorders, as well as the timeliness of the rehabilitation measures taken.

The aim of the study is to improve the quality of treatment and to study the features of orthodontic preparation for surgery in children with congenital cleft lip and palate.

Research objectives:

- 1. Conduct a comparative analysis of the clinical manifestations of various forms of congenital cleft lip and palate;
- 2. To study the state of the oral cavity in children with congenital cleft lip and palate;
- 3. Carry out orthodontic treatment of congenital cleft lip and palate;
- 4. Evaluate the features of orthodontic treatment of children before surgery with congenital cleft lip and palate;

Materials and research methods. In order to solve the set tasks, we examined and treated 55 patients with congenital cleft lip and palate, who were observed at the Department of Pediatric Dentistry in the multidisciplinary children's medical center in Bukhara. The material for our study was the results of surgical treatment of children with congenital bilateral cleft lip and palate.

35 patients with congenital complete cleft lip and palate, aged from 6 months to 6 years, were under observation and treatment in the Department of Maxillofacial Surgery of the Bukhara Multidisciplinary Children's Center. The studies were carried out in 35 children with congenital cleft lip and palate. Depending on the treatment, all the examined were divided into 2 groups: 1 - group of sick children who underwent only cheiloplasty at the age of 6-8 months, 2 - group of patients, children who underwent complex pre-preoperative preparation before cheiloplasty with different specialists.

Research results. Clinical observations have shown that 71% of children born with cleft lip of the palate turn to specialists in the later stages, who for a long time are fed using a gastric tube, due to various comorbidities. The child is usually transferred from breastfeeding to regular feeding. This period of rehabilitation is aimed at preparing and performing an uranoplasty operation, which is usually performed in children at the age of 2.5-3 years. Cleft lip was diagnosed twice as often in boys as in girls. A cleft palate was more observed in girls. With regard to the clinical forms of congenital clefts, it was revealed: congenital cleft palate (39.6+1.1%) and combined cleft lip of the alveolar process, hard and soft palate (34.27+1.15%), in total - 73.87+1.06%. Congenital cleft lip was 26.13+1.06%. More often, congenital cleft lip and palate was in boys 54.30%. Concomitant diseases in children with congenital cleft lip and palate were characterized by a high incidence of ENT diseases - 79.09%, acute respiratory infections, acute respiratory viral infections - 74.22%, respiratory system diseases - 40.22%, CNS pathology - 29.02%, diseases of the cardiovascular system (17.12%) and gastrointestinal tract - 11.7%.

It was revealed that the oral cavity and nose of newborns with cleft clefts from the first days of life leads to a violation of the act of breast sucking in 21% of children with these pathologies, breast milk was fed up to 9-10 days, after which they switched to artificial nutrition. Based on the foregoing, it follows that with cleft lip and palate, forced artificial feeding negatively affects the physical development of the child. They become the cause of postponing surgical interventions for longer periods and possible postoperative complications.

Conclusions: The problem of rehabilitation of children with congenital cleft palate is multifaceted and complex. The ultimate goal of rehabilitation measures is to restore the function of the articulatory apparatus and the formation of correct speech in children. The main method of treating such children is the surgical elimination of the defect of the upper lip and palate - cheiloplasty and uranoplasty. However, in most cases, surgical treatment, restoring the integrity of the palatopharyngeal ring, does not always ensure its sufficient functioning, which causes difficulty in normal nutrition and various speech defects. The severity of this pathology in children, the unsatisfactory quality of life, the impossibility of full rehabilitation of patients with congenital cleft

palate substantiates the high relevance of the problem of rehabilitation of children with congenital cleft lip and palate.

Literature:

- 1. Мамедов Ад.А. Алгоритм реабилитации детей с врожденной расщелиной верхней губы и неба / Ад.А.Мамедов // Врожденная и наследственная патология головы, лица и шеи у детей: актуальные вопросы комплексного лечения.-М.: МГМСУ, 2012. С. 151-155
- 2. Baskaran M, Packiaraj I, Arularasan SG, Divakar TK. Cleft rhinoplasty. J Pharm Bioallied Sci. 2015 Aug;7(Suppl 2):S691-4.
- 3. Rahmatilloyevna K. F. et al. Prevention of Major Dental Diseases in Preschool Children //Eurasian Medical Research Periodical. 2022. T. 6. C. 172-174.
- 4. Rahmatilloyevna K. F. et al. Improving the Methods of Treatment and Prevention of Complications of Odontogenic Diseases of the Jaws in Children //Eurasian Medical Research Periodical. 2022. T. 6. C. 168-171.
- 5. Rahmatilloyevna K. F. et al. Comparative Characteristics of Surgical Methods for Fixing Bone Fragments of the Zygomatic Bone and Arch //Eurasian Journal of Humanities and Social Sciences. 2022. T. 6. C. 46-48.
- 6. Kamalova F. R., Xamitova A., Safarova S. **APPLICATION** OF F. M. //**湖南大学学**报 AUTHEMOTOMBOCYTE **MASS** IN SURGICAL **DENTISTRY** (自然科学版). - 2021. - T. 48. - №. 7.
- 7. Rahmatillaevna K. F., Umarovich S. S. Consequences Of Early Extraction of Deciduous Teeth in Children //Eurasian Medical Research Periodical. − 2021. − T. 1. − № 1. − C. 51-54.
- 8. Axtamovich R. A. Improvement of Treatment and Prevention of Fluorosis in Children of School Age //Middle European Scientific Bulletin. 2022. T. 22. C. 170-172.
- 9. Axtamovich R. A. Evaluation of the Results of Primary Cheiloplasty in Children with Congenital Bilateral Cleft Lip and Palate //Middle European Scientific Bulletin. 2022. T. 22. C. 173-177.
- 10. Раджабов А.А., Раджабов А.Б., Темирова Н.Р., Камалова Ш.М. Оценка результатов первичной хейлопластики у детей с врожденной двусторонней расщелиной верхней губы и нёба// Электронный научный журнал «Биология и интегративная медицина». 2017. № 5. С. 36-46.