

Pre-Surgical Orthodontic Training in Children with Unilateral Cleft Lip and Palate

Yadgarova Gulnora Sadritdinovna, Ph.D

Of the Department of Surgical Dentistry, Bukhara State Medical Institute

Mirzaeva Firusa Avazovna

Bukhara State Medical Institute Assistant of the Department of Surgical Dentistry

ABSTRACT

The study and improvement of the life status of children with congenital cleft lip and palate using temporary silicone nipples and plates showed a positive effect on the development of speech defects and on the anthropometric parameters of the maxillae and dentoalveolar arch. 135 infants born with CCLP were recruited, of which 83 were male and 52 were female. The babies were divided into 2 groups. Group 1 - the main group of 68 infants (of which 42 are male and 26 are female) and group 2 - the control group of 66 infants (of which 41 are male and 26 are female). The studied changes and their systematization lead to a decrease in maxillofacial pathologies, as well as growth and development of the definition, which contributes to the non-hormonal development of the child. The introduction of the obtained data into practical healthcare will reduce the proportion of maxillofacial anomalies. For the first time, the method of using early orthodontic treatment of children with CCLP, carried out with the help of the "Dental Obturator for orthodontic treatment of children with CCLP" was scientifically substantiated.

ARTICLE INFO

Article history:

Received 26 Oct 2022

Received in revised form

25 Nov 2022

Accepted 26 Dec 2022

Keywords: cleft, children, lip, palate, silicone, obturator.

Hosting by Innovatus Publishing Co. All rights reserved. © 2022

Introduction. The infancy period. Organization of artificial feeding with the help of various devices (a nipple in a nipple, a nipple with a "petal", a "floating" obturator, an elastic obturator). The elimination of deformation of the upper jaw begins with an uneven expansion, namely a larger one in the anterior section and a smaller one in the lateral ones. At the age of 6 months to 1 year, a surgical operation is performed – cheylorinoplasty. Before surgery, an orthodontist should make a nasal liner to prevent deformities of the nostrils after surgery. The period of mixed bite. When the incisors located on the interdigital bone erupt, their incorrect bookmark is manifested. Violations of embryonic development and the formation of an extended defect in the lip and palate lead not only to persistent changes in anatomical structures immediately after birth, but also delayed adverse outcomes in the process of growth and development of children. This provision explains the presence of characteristic clinical signs of RGN. The central incisors can be rotated around the axis, rejected orally. The lateral incisors are either absent or have an improperly formed crown and are located abnormally. In the area of the defect of the alveolar process, as well as along the edges of the cleft, there are usually supercomplete teeth. The bite is broken, there may be a deep incisor overlap, in the area of the canines and the first temporary molars – dental alveolar shortening and often an open bite. Plates and obturators are used to expand the upper jaw. Treatment of patients with cleft lip.. In the Republic of Uzbekistan today, the birth rate of children with congenital cleft of the upper lip and palate is higher than the national average. Violations of such vital functions as breathing, nutrition and speech, aesthetic defects associated with congenital cleft of the upper lip and palate, adversely affect the overall physical and intellectual development of the child. The feeling of inferiority, the reaction of others to speech cause such a child to have difficult experiences, which, of course, affects the formation of his psyche. These psychological layers, in turn, further aggravate speech

disorders. Speech defects that were not eliminated in childhood subsequently hinder the choice of a profession, interfere with work and everyday life. The relevance of studying issues related to complex treatment is determined by the absence of a tendency to decrease disability due to this pathology, which is largely due to the low level of all types of prevention and the curtailment of medical examination programs. To prevent this pathology, a comprehensive approach of scientists and doctors of different specialties is required. At the same time, the issues of diagnosis, treatment, and rehabilitation of patients with jaw deformities are one of the most difficult problems of modern surgical dentistry. The importance of this problem is primarily determined by the high frequency of this pathology. 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 care of health protection.

The purpose of the study. To study and improve the life status of children with congenital cleft lip and palate. Material and methods of research. 135 infants born with VGN 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). Temporary silicone nipples and plates were applied to the main group of infants, which facilitated sucking and swallowing acts and improved speech defects, while traditional methods of treatment were applied to the 2nd group of infants. When performing this dissertation, plaster models of infants were used, clinical and anthropometric methods were used to obtain parameters with congenital cleft lips 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 with the help of temporary silicone nipples and plates, as well as to determine the state 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 dental system during the change of teeth in children with congenital cleft lips and palate before urano- and cheylorinoplasty in a comparative aspect. At the same time, to determine the early timing of surgical intervention in children with cleft lips and palate, to improve the life status of children with congenital cleft lips and palate with the help of temporary silicone plates (obturators) replenishing elements that facilitate sucking.

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 lips 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 dental alveolar arch in newborns in the period before and after the use of the proposed obturator, its effect on the growth and development of the alveolar process, was carried out. In group 1 of infants, an improvement in the life status of children with congenital cleft lips and palate was determined with the help of temporary silicone nipples and plates, the normal state of bite in children with congenital cleft lips and palate was determined depending on age, and speech defects in children with congenital cleft lips and palate improved with the help of temporary silicone plates (obturators) than in the 2nd group of children with VRGN (the control group has the same indicators over time).

Conclusion. Thus, the study showed that on the basis of 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 lips and palate using temporary silicone nipples and plates was carried out, a positive effect was proved. For the first time, a comparative analysis of the parameters of the upper dental alveolar arch in newborns in the period before and after the use of the proposed obturator, its effect on the growth and development of the alveolar process, was carried out. The studied changes and their systematization lead to a decrease in maxillofacial pathologies, as well as growth and development, which contributes to the non-hormonal development of the child. The introduction of the obtained data into practical healthcare will reduce the proportion of maxillofacial anomalies. For the first time, the method of using early orthodontic treatment of children with VGN, carried out with the help of a "dental obturator for orthodontic treatment of children with VGN" has been scientifically substantiated.

References:

1. A.S. Artyushkevich et al. "Age morphology of the breast bone". 2013. Minsk.
2. M.A. Pogrel, K.E. Kahnberg, L. Andersson "Essentials of Oral and Maxillofacial Surgery " 2014. Cothenburg.
3. M.E. Zorich, O.S. Yatskevich, A.I. Karanevich, 2013; N.A. Peleshenko, "The choice of methods of surgical treatment of patients with congenital cleft palate" 2013. Tadjikistan.
4. Yunusov A.S., Mammadov Ad.A., Gubeev R.I. The problem of reconstructive surgery of the external nose and intra-nasal structures in children who have previously undergone cheilouranoplasty // ENT-praktika. - 2014. - No. S. - pp. 62-63. KAMBAROVA S. A. Effect of Surgical Manipulation in Morphometric Growth of Maxillofacial Area at Children with Congenital Lip and Palate Splits At I and II Period of Childhood // Annals of the Romanian Society for Cell Biology. – 2021. - Vol. 25. - Issue 4. – P. 1853 – 1858.
5. Kambarova Sh.A. IDENTIFICATION OF THE MORPHOMETRIC PARAMETERS OF THE CRANIO-FASCIAL REGION OF CHILDREN WITH CONGENITAL CLEFT AND PALATE REFLECTIONS USING A DEVELOPED RESEARCH MAP // CENTRAL ASIAN JOURNAL OF MEDICAL AND. – 2021. - Vol. 2. - Issue 3. – P. 286 – 290.
6. Kambarova S.A. THE INFLUENCE OF SURGICAL MANIPULATION ON THE MORPHOMETRIC DEVELOPMENT OF THE FACE AND JAW IN PATIENTS WITH CONGENITAL DISTANCES OF THE LIPS AND PRIVATE MOTOR // New day in medicine. – 2021. - P. 128 - 130.
7. Kambarova Sh.A., Pulatova Sh.K. Revitalization of nonspecific immunity factors in patients with diffuse phlegmoine of the maxillo facial area using Bakteriofags // New day in medicine. - 2020. - P. 128 - 130.
8. Саидова М. М. Хамроева Ю. С. CARDIOVASCULAR RISK IN PATIENTS WITH SYSTEMIC SCLERODERMA //Новый день в медицине. – 2020. – №. 1. – С. 367-370.
9. Саидова М. М. Кардиоваскулярная комарбидность у больных ревматоидным артритом //II Межрегиональная конференция кардиологов и терапевтов.–Ульяновск. – 2016. – С. 136-137.
10. Саидова М. М. Ревматоид артрит билан касалланган беморларда кардиоваскуляр патологиянинг ривожланиши ва авж олишини прогностлаш. – 2020.
11. Sivkov I. I., Mukharlyamov N. M., Agababyan I. R. The effect of peripheral vasodilating agents on the microcirculatory channel in congestive circulatory insufficiency //Sovetskaya meditsina. – 1987. – №. 1. – С. 3-9
12. Саидова М. М. Камилова У. К. Сердечно-сосудистый риск по шкале MSCORE у больных ревматоидным артритом //Евразийский кардиологический журнал. – 2019. – №. S1. – С. 381.
13. Saidova M., Kamilova U., Yusupaliev B. GW29-e1132 Evaluation cardiovascular risk indices in patients with rheumatoid arthritis //Journal of the American College of Cardiology. – 2018. – Т. 72. – №. 16S. – С. C216-C216.
14. Komil o'g'li A. M. Orientation to Acute Kidney Injury in Covid-19 //БАРҚАРОПЛИК ВА ЕТАКЧИ ТАДҚИҚОТЛАР ОНЛАЙН ИЛМИЙ ЖУРНАЛИ. – 2021. – Т. 1. – №. 5. – С. 330-333.
15. Amonov M. K. O. Risk factors for severe and critical patients with COVID-19 //Oriental Renaissance: Innovative, educational, natural and social sciences. – 2021. – Т. 1. – №. 10. – С. 1080-1084.
16. Амонов М. К. У., Кароматов И. Д. Мед и его использование при заболеваниях дыхательных путей, слизистых оболочек и глаз //Биология и интегративная медицина. – 2020. – №. 3 (43). – С. 171-187.
17. Агабабян И. Р. и др. Метаболический синдром как один из основных факторов развития артериальной гипертонии //Достижения науки и образования. – 2019. – №. 10 (51). – С. 54-58.

18. Agababyan I. R., Agababyan L. R. The diagnostic value of routine research methods electrocardiography and echocardiography in patients with chronic heart failure elderly //International Conference «Process Management and Scientific Developments. – 2019. – C. 168-171.
19. Sivkov I. I., Mukharlyamov N. M., Agababyan I. R. The effect of peripheral vasodilating agents on the microcirculatory channel in congestive circulatory insufficiency //Sovetskaya meditsina. – 1987. – №. 1. – C. 3-9.