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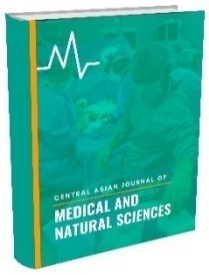

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IDENTIFICATION OF THE MORPHOMETRIC PARAMETERS OF THE CRANIO-FASCIAL REGION OF CHILDREN WITH CONGENITAL CLEFT AND PALATE REFLECTIONS USING A DEVELOPED RESEARCH MAP

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ABSTRACT: ***Relevance***. *This article proposes the technology of creating an effective morphometric research form (RF) based on an informed study plan. The RF developed is a means of collecting data on morphometric indicators of the craniofascial region of children of the I and II childhood with congenital cleft lips and palate after urano- and cheilorinoplasty and registration of a study on paper media.*

The aim *of the study was to develop a RF to investigate the change in morphometric parameters of the craniofascial region in children with congenital cleft lip and palate after cheilorinoplasty and uranoplasty.*

Materials and methods. *Morphometric indicators of the craniofascial region for each child are collected in a RF, which was conducted at the Department of Surgical Dentistry of the BSMI. The RF was approved by the Ministry of Health of the Republic of Uzbekistan by the Department of Scientific and Medical Information under registration number No. 0456, 08.02.2021.*

Results. *RF facilitates efficient and complete data processing, analysis and reporting on measurement parameters. The measurement data collected during the study were complete and accurately reflected all morphometric measurements, which proved some deviations on the upper jaw in children of the I and II childhood period with congenital cleft lips and palate after urano- and heilorinoplasty.*

Conclusion. *To achieve the effectiveness of comprehensive treatment of children with cleft lip and palate, a detailed study of the dynamics of the movement of upper jaw segments throughout all age periods is necessary. In this regard, RF is of important scientific and practical importance in the collection of morphometric parameters of the craniofascial region of children of the I and II period of childhood with congenital cleft lips and palate.*

Keywords: cleft lip and palate, research form, craniofascial area, morphometric parameters

Introduction: Congenital malformations (congenital malformations) are one of the most pressing medical and social problems due to their high frequency and severity, which in itself is a significant problem for public health and determines the relevance of studying the causes and features of the spread of congenital malformations in different regions [7].

According to the WHO, the birth rate of children with congenital pathology of the maxillofacial region is on average 1 in 750 newborns. Congenital cleft lip and palate occurs in 30% of all human malformations and in 86% of all types of pathology of the maxillofacial region [1, 3].

At present, the birth of a child with a cleft lip and palate varies widely in different countries. The reasons for the occurrence of malformations in the PMO still remain insufficiently clarified. Some of them may represent the same violation, degree of difference.

The system of complex treatment of children with CRHN provides for multi-stage interdisciplinary interaction of specialists [2].

In this regard, it is important to follow the WHO definition, according to which health is a human condition, which is characterized not only by the absence of diseases or physical defects, but complete physical, mental and social well-being. In turn, the quality of life is an integral characteristic of the physical, social, mental or emotional functioning of a person, based on subjective perception. It is obvious that various components of the quality of life indicator largely depend on the quality and results of treatment of children, which include the education of children at school and university, as well as labor and social activity [2].

В комплексном лечении детей с расщелиной губы и неба актуальными и спорными остаются вопросы интеграции хирургических и ортодонтических задач, несмотря на признание её необходимости практически всеми клиницистами [4].

The study of the morphometric parameters of the craniofascial region (MPKO) in children of the 1st and 2nd period of childhood with congenital cleft lip and palate (CRGN) and its correspondence to the principle of the golden section, including various pathological conditions. The study of the growth, development and condition of the facial skeleton of a child can serve as a theoretical and methodological basis for the development and improvement of anthropometric methods of diagnosis and reconstruction in medicine, substantiation of new principles for the prevention and treatment of dentoalveolar anomalies. Taking into account the proportions of the face is important in surgical, orthodontic and orthopedic dentistry. For this reason, dental surgery specialists are interested in measuring individual facial dimensions. Pictures of facial proportions before, during and after treatment are used to control the success of the intervention. In the modern concept of surgical treatment, the main task is to achieve the desired results, taking into account the individual. If you do not take into account the parameters of the face during treatment, then the results may not be positive. The implementation of the above aspects and the development of criteria and the improvement of predictive approaches to diagnostics determines the urgency of this problem.

Purpose of the study: To develop a study map to study the morphometric parameters of the craniofascial area in children of the 1st and 2nd period of childhood with congenital clefts of the lip and palate after uranium and cheilorinoplasty.

Materials and methods of research: to achieve this goal, we selected 20 patients (14 boys, 6 girls, age: 5.6 ± 2), who were divided into 2 groups. The 1st group consisted of 10 people (9 boys and 1 girl) with a third-class ARGN, based on average age. The average crack size was 5.3 ± 2.3 mm. Group 2 (control group (CG)) included 10 patients with defects (9 girls, 1 boy) of the first class. After we formulated the tasks and determined the structure of the study, these plans were documented in the protocol (program). In this regard, we have developed a "Study Map", which allows you to examine the child in detail, determine the morphometric characteristics of the craniofascial area of children of

the 1st and 2nd period of childhood with congenital clefts of the lip and palate after uranium and cheilorinoplasty, taking into account gender (boys and girls) and evaluate compliance of these parameters according to the "principle of the golden section".

The morphometric study map (MCI) for recording the morphometric parameters of the craniofascial area of children of the 1st and 2nd period of childhood with congenital clefts of the lip and palate serves as a means for collecting the data specified in the study protocol. All morphometric indicators of the craniofascial area for each child are collected in a study map. This article proposes a technology for creating an effective MCI based on a sound research plan.

The developed MCI is a means of collecting data on the morphometric parameters of the craniofascial area of children of the 1st and 2nd period of childhood with congenital clefts of the lip and palate after uranium and cheilorinoplasty and registration of a paper study conducted at the Department of Surgical Dentistry of the Belarusian State Medical Institute. The study card (CI) was approved by the Ministry of Health of the Republic of Uzbekistan by the department of scientific and medical information under the registration number - No. 0456, 02/08/2021.

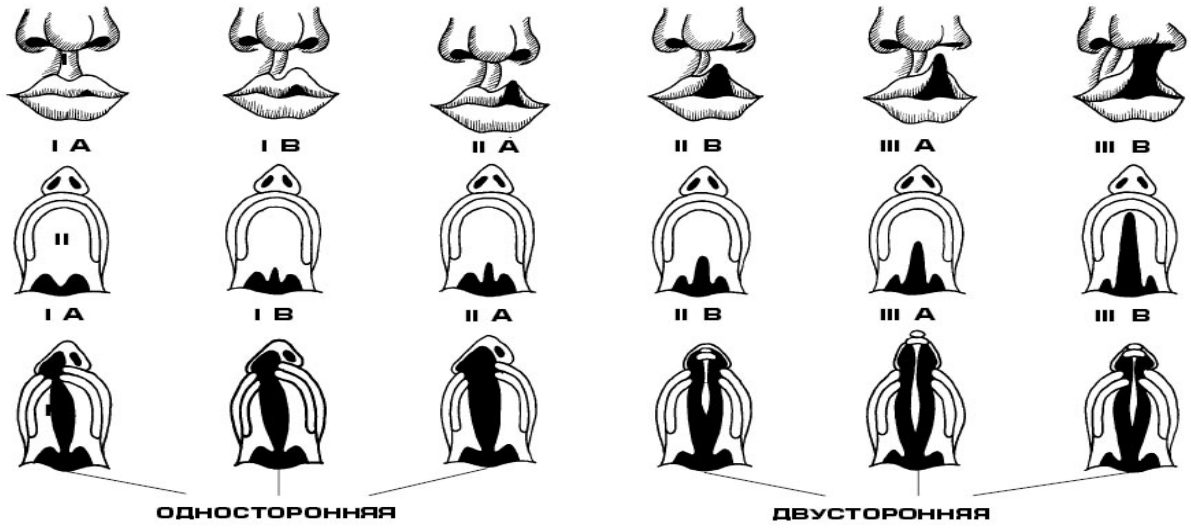
MKI serves to perform several tasks:

- ensures the collection of basic data about the child and includes the following questions: last name, first name, patronymic of the child, name of the school (d-kindergarten), settlement, place of birth, year and month of birth, nationality of parents, date of enrollment in school, living conditions , work regime, past illnesses, the number of children in the family, what kind of child, what type of feeding was, the marriage of the family. (A) kinship, B) long-range), mother's health;

- provide the collection of the results of measuring the physical development of the child (measurements were carried out with a special compass, measuring tape, scales and a ruler that determines the angle of the lower jaw). The physical parameters of the measurement included the parameters of the lower extremities, thigh length, thigh girth, thigh width, shin length, shin girth, foot length, number of teeth, chest, body weight, torso length, body length, waist circumference, abdominal circumference, upper segment length , transverse chest diameter, anteroposterior chest diameter, chest height, upper limb length and thickness of subcutaneous fat;

- the next task provides the collection of the results of measuring the physical development of the craniofascial region of the child, and with the above, the shape of the skull, longitudinal diameter, transverse size, head circumference, transverse size of the forehead, height or vertical diameter, size of the base of the skull, face, zygomatic diameter were measured and determined , angle of the lower jaw, mandibular diameter, physiological height of the face, height of the nose, width of the nose, external orbital width, interorbital width, height of the mucous part of both lips, mouth width.

In addition, there is the task of determining the structure of the face and teeth (dentition) on the basis of an orthopantomogram, and at the end, the degree of cleft lip and palate is included in the MCI in the form of pictures, where you can indicate the type of pathology (Fig. No.-1).



Picture 1. Classification of cleft lip and palate.

Results and discussion: ICIs facilitate efficient and complete data processing, analysis and reporting on measurement parameters. The measurement data collected during the study at the Department of Surgical Dentistry BSMI were complete and accurately reflected all morphometric measurements, which proved some deviations in the upper jaw in children of the 1st and 2nd period of childhood with congenital clefts of the lip and palate after uranium and cheilorinoplasty ... CI promotes adherence to an accurate research plan to justify the research itself, its objectives, a statistical analysis plan, methodology and conditions of conduct. The terms used in CI are specific, understandable and unambiguous. CI is formed in such a way that, if necessary, there was a possibility of re-examination. First of all, during the formation of CI, the types of research and the necessary questions were determined to find out complete information about the child and the performed surgical procedures, but before that we informed the parents of children of the 1st and 2nd period of childhood with congenital clefts of the lip and palate, who had undergone uranium and cheilorinoplasty. and took consent to participate in the study after they were familiar with all aspects of the study.

All data were analyzed and primary normal measurements were obtained. The data obtained in addition to the analysis of the mean standard deviation showed statistically significant associations and a 95% confidence interval. P <0.05 (P> 0.05) was taken into account. All measurements were repeated 6 weeks after the initial measurements to detect errors associated with linear measurements. Analysis of repeated measurements did not reveal any differences between them.

Conclusions: With age, the child undergoes various changes in the dentition and occlusion, which are associated with the nature of the diet and the change of milk teeth to permanent ones. To achieve the effectiveness of complex treatment of children with clefts of the lip and palate, it is necessary to study in detail the dynamics of movement of the segments of the upper jaw throughout all age periods. Particular attention should be paid to the type of ROL and the protocol of lip plasty, since after cheilo - and uranoplasty, secondary deformities are aggravated as the patient grows and are difficult to eliminate due to the multifaceted pathology. Therefore, it is very important to understand the origin of secondary deformities of the alveolar process of the upper jaw, as well as to determine the optimal timing and volume of surgical procedures. In this regard, CI is of great scientific and practical importance in the collection of morphometric parameters of the craniofascial region of children of the 1st and 2nd period of childhood with congenital clefts of the lip and palate.

Literature:

1. Danilova M.A. Assessment of the harmony of the face profile in children with various types of myofunctional disorders / M.A. Danilova, O.A. Tsarkova, Yu.V. Gvozdeva // Contemporary art of medicine. - 2013. - No. 1 (9). - S. 87-91.
2. Ershova O. Yu. Comparative assessment of the results of alveoloplasty in children with congenital cleft of the upper lip, alveolar ridge and palate in different age groups / O. Yu. Ershova, A. E. Tkachenko, G. V. Dolgopolova // Congenital and hereditary pathology of the head, face and neck in children: topical issues of complex treatment: materials of the V All-Russian scientific and practical conference. - Moscow, 2016 .-- S. 83-87.
3. Materials of the V All-Russian scientific-practical conference Congenital and hereditary pathology of the head, face and neck in children: topical issues of complex treatment. M., 2016 .-- 346 p.
4. Shulzhenko VI, AF Verapatvelyan, S. Gushchina, Orthodontic treatment during temporary occlusion within the framework of the rehabilitation protocol for children with non-union of the lip and palate. Kuban Scientific Medical Bulletin, Kuban-4 (127) 2011. - S. 196-199.
5. Kambarova Sh.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 R.S.C.B. SCOPUS., ISSN: 1583-6258, Vol. 25, Issue 4, 2021, Pages. 1853 - 1858 Received 05 March 2021; Accepted 01 April 2021.
6. Kambarova Sh.A. Effect of surgical manipulation to morphometric development of face and jaw in patients with congenital lip and palate splits, journal of Tibbiyotda yangi kun, Uzbekistan -1 (33) 2021.S: 238-241.
7. Wangsrimongkol T, Manosudprasit M, Pisek P, Chittiwatanapong N. Prevalence and Types of Dental anomaly in a Thai non-syndromic oral cleft sample. J Med Assoc Thai. 2013; 96 (Suppl 4): S25–35.