NEW APPROACH OF CHEILO-PALATOPLASTY IN CHILDREN WITH UNILATERAL CONGENITAL CLEFT LIP AND PALATE

Dusmuhamedov D.M.[1], Yuldashev A.A.[2], Dusmuhamedov M.Z.[3]
(Republic of Uzbekistan) Email: Dusmuhamedov337@scientifictext.ru

[1]Dusmuhamedov Dilshod Makhmudjanovich - Assistant,
DEPARTMENT OF A SURGICAL ODONTOLOGY AND DENTAL IMPLANTOLOGY;
[2]Yuldashev Abduazim Abduvaliyevich - Doctor of Medical Sciences, Associate Professor,
DEPARTMENT OF A CHILDREN'S MAXILLOFACIAL ODONTOLOGY;
[3]Dusmuhamedov Makhmudjon Zokirovich - Doctor of Medical Sciences, Professor, Vice Rector for study,
TASHKENT STATE DENTAL INSTITUTE,
TASHKENT, REPUBLIC OF UZBEKISTAN

Abstract: *the congenital cleft lip and palate (CCLP) is one of the most common malformations of the face and jaws, and it is among the most severe defects in terms of the severity of the anatomical and functional disorders. The article describes a case report of a complex rehabilitation of a patient with congenital unilateral cleft upper lip and palate. An integrated approach to the treatment of congenital unilateral cleft upper lip and palate involves good cooperation between healthcare professionals, patient compliance and parental involvement in unilateral cleft upper lip and palate treatment.*
Keywords: *maxillofacial surgery, children, congenital defect, cleft upper lip and palate, orthodontic treatment, cheilo-palatoplasty.*

НОВЫЙ ПОДХОД В ХЕЙЛО-ПАЛАТОПЛАСТИКЕ У ДЕТЕЙ С ОДНОСТОРОННЕЙ ВРОЖДЕННОЙ РАСЩЕЛИНОЙ ВЕРХНЕЙ ГУБЫ И НЁБА

Дусмухамедов Д.М.[1], Юлдашев А.А.[2], Дусмухамедов М.З.[3]
(Республика Узбекистан)

[1]Дусмухамедов Дилшод Махмуджанович – ассистент,
кафедра хирургической стоматологии и дентальной имплантологии;
[2]Юлдашев Абдуазим Абдувалиевич – доктор медицинских наук, доцент,
кафедра детской челюстно-лицевой стоматологии;
[3]Дусмухамедов Махмуджон Зокирович – доктор медицинских наук, профессор, проректор по учебной работе,
Ташкентский государственный стоматологический институт,
г. Ташкент, Республика Узбекистан

Аннотация: *врожденные заячья губа и нёбо (ВЗГН) являются одним из наиболее распространенных пороков развития лица и челюстей и это среди самых тяжелых дефектов с точки зрения серьезности анатомических и функциональных расстройств. В статье представлено описание клинического случая комплексной реабилитации ребенка с врожденной односторонней полной расщелиной верхней губы и нёба. Результат лечения обусловлен комплексным взаимодействием ряда специалистов, кооперацией пациента и степенью усилий его родителей.*
Ключевые слова: *челюстно-лицевая хирургия, дети, врожденный дефект, расщелина верхней губы и нёба, ортодонтическое лечение, хейло-палатопластика.*

Regardless of the age of a child suffering from the congenital cleft lip and palate (CCLP), the main task of the surgeon is to restore anatomic form of the lip and its adequate functioning. Nowadays there are a lot of methods which provide only underwhelming aesthetic and functional results, but still need some improvement [2, 4, 5].

According to different authors the number of individuals with the postoperative complications and the poor long-term results after cheilo- and palatoplasty ranges from 16 to 52%. In domestic and foreign literature inadequate attention is paid to the primary cheiloplasty with the most optimal methods taking into account the degree and a form of the cleft. A high percentage of unsatisfactory results points to a lot of unresolved issues and the relevancy of this problem. The most debated issue is the determination of the optimal age and methods for surgical treatment of children with the congenital malformations of the face and jaws [3].

The urgency of this problem is determined not only by the high fertility rate of children suffering from this disorder, but also with the difficulties in selection of the surgical treatment [4]. We think that the main cause of unacceptable functional and cosmetic results could be also the imperfection of the traditional treatment methods, unreasonable choice of those methods of surgical correction and the age approaches to its implementation. Also the important cause of failure is the lack of sufficiently clear and complete picture of the problems which are

inherent to these patients, and the effects of the implementation of certain surgical procedures in remote postoperative period [1].

The global experience on treating patients with CCLP caused the possibility of good results of surgical correction of the primary defects and secondary deformities [2, 5]. At the same time, the existence of such issues as the optimal age of the child for the primary surgical correction, choice of the optimal functional and less traumatic method, the cumulative effect of these factors on the subsequent state of the sense of hearing, the speech, the growth of the maxilla and the middle zone of the face and the general development of a child, remains controversial and widely discussed in the domestic and foreign literature. However, it is obvious that timely and correct implementation of the first stage of surgery determines the success of the rehabilitation of patients with the congenital cleft lip and palate [1, 5].

The main and most effective way of the cleft lip's plastic reconstruction is the flap cheiloplasty, which reasonably undergoes changes and improvements over the last few years. The methods of primary cheiloplasty described by Tennison, Obukhova and Millard are in common use in the world's practice. For palatoplasty are used the traditional methods in age from 2,5 to 7 years in order to prevent the damaging effect of the surgery on the growth of the upper jaw. However, in most cases these techniques do not relieve patients from the problems associated with the deformation of the upper jaw, the presence of abnormalities of occlusion and dentition defect, and they do not allow full recovery of speech, and cause trouble the social adaptation of the child [2, 3, 4].

Improvement of the efficiency of treatment of the children with the congenital cleft lip and palate, based on anatomically sound approach to surgical treatment and shortening the stages of surgical rehabilitation of the children with the CCLP.

Modern understanding of the development process, the formation and growth of the facial skull and surrounding tissues, knowledge of anatomy and physiology premaxillary-maxillary complex in normal and congenital cleft lip and palate have allowed us to develop and to implement in treatment the functional and gentle method of its correction. The proposed method of the primary cheilo-palatoplasty helps to form a full vestibule of mouth, to close oro-nasal fistula, which allows a normal development of the dent-alveolar arch and facilitates to early orthodontic treatment, reduces stage surgical treatment. As the prototype was taken one-step method of cheilo-palatoplasty by Burian F. (1955).

Operative intervention was performed to all patients under the endotracheal anesthesia. We preferred to use the absorbable sutures «VICRYL 5-0», «POLYSORB 5-0» for suturing the muscles and the oral mucosa, and not absorbable sutures «PROPILEN 6-0» or «SURGILENE 6-0» for the skin. Before performing the incisions on the tissue of the upper lip, the nose and the alveolar bone the 0,5% Novocain solution with the traces of adrenaline was injected, which greatly facilitated dissection of tissue and reduced bleeding during the surgery.

12 children with the congenital unilateral cleft lip and palate at the age of 6-10 months got the primary cheilo-palatoplasty by the proposed method at the clinic of children's maxillofacial surgery of the Tashkent State Institute of Stomatology.

By our method of primary cheiloplasty facilitated to simultaneously restore the vestibule of mouth, to close oro-nasal fistula and to correct the cleft in the anterior part of the hard palate. To assess the severity of disease we have used the classification of Frolova L.E. (1974). Analysis of the literature and our clinical experience show that the CCLP almost always is accompanied by a shortening of frenulum. The classification of the Khoroshilkina F.Y. (1982) was used for assessment of the level of shortening of frenulum.

Thus, the use of the performed method in congenital unilateral cleft lip and palate allows to simultaneously eliminate the upper lip's cleft and the oro-nasal fistula, to normalize the vestibular space by extending the upper lip frenulum and close the cleft of the anterior part of the hard palate, which consequently reduces the operational and orthodontic intervention stages.

References / Список литературы

1. *Amanullaev R.A.* Frequency of fertility children with congenital cleft lip and palate in the major regions of Uzbekistan // Congenital and hereditary diseases of the head, face and neck of children. Topical issues of complex treatment: materials of scientific practical conf. M., 2006. P. 14-15.
2. *Lilja H.* Treatment of congenital cleft lip and palate in Gothenburg // congenital and hereditary diseases of the head, face and neck of children. Topical issues of complex treatment: scientific practical conf. materials / M., 2002. P. 150-151.
3. *Yakovlev S.V., Dyakov S.V., Kondrashov S.P.* The frequency of comorbidity of children with isolated cleft lip and palate // Prevention and treatment of dental diseases of children: Materials of republican conference of dentists. Ufa, 2006. P. 90.
4. *Ciancio S.G.* Cleft lip and palate gene identified // J. Am. Dent. Assoc., 2000. Vol.131, № 10. P. 1414-1418.

5. *Nagahama M., Laguinge R., Sakamoto N.* Secondary unilateral cleft lip nasal deformities: Open approach for correction // Transactions of 9th International congress on cleft palate and related craniofacial anomalies. Goteborg. Sweden, 2001. P. 91-105.