The American Journal of Medical Sciences and Pharmaceutical Research (ISSN – 2689-1026)
VOLUME 05 ISSUE 08 Pages: 39-43
SJIF IMPACT FACTOR (2020: 5. 286) (2021: 5. 64) (2022: 6. 319) (2023: 7. 396)
OCLC – 1121105510
Publisher: The USA Journals

Journal Website: https://theamericanjournals.com/index.php/tajmspr

Research Article

PRINCIPLES OF TREATMENT OF CONGENITAL CLEFT PALATE AND LIP

Submission Date: August 06, 2023, Accepted Date: August 11, 2023,
Published Date: August 16, 2023 |
Crossref doi: https://doi.org/10.37547/TAJMSPR/Volume05Issue08-07

Sharopov Sanzhar Gayratovich
Phd, Associate Professor Bukhara State Medical Institute, Uzbekistan

Tojiev Feruz Ibodullo Ugli
Doctor Of Medical Sciences, Associate Professor Tashkent State Dental Institute, Uzbekistan

Azimov Mukhammadjon Ismoilovich
Doctor Of Medical Sciences, Professor Tashkent State Dental Institute, Uzbekistan

Inoyatov Amrillo Shodiyevich
Doctor Of Medical Sciences, Professor Bukhara State Medical Institute, Uzbekistan

Ismoilkhodjaeva Komila Gani Kizi
Tashkent State Dental Institute, Uzbekistan

ABSTRACT

Congenital cleft lip and palate (cheiloschisis) is a soft tissue cleft in the middle part of the lip (colloquially known as "harelip") and/or a cleft palate (colloquially known as "wolf's mouth"). This severe malformation of the maxillofacial region is accompanied by gross functional disorders. In addition, the peculiarity of this pathology is a pronounced deformation of the nose in the form of 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.

KEYWORDS

Congenital cleft lip and palate, malformation, deformity, rehabilitation.

INTRODUCTION

One of the main causes of congenital cleft lip and palate is the disease of women in early pregnancy[2,4]. It may be the influence of psychogenic factors: severe stress, anxiety, work, bad habits cause irreparable

The American Journal of Medical Sciences and Pharmaceutical Research
(ISSN – 2689-1026)
VOLUME 05 ISSUE 08 Pages: 39-43
SJIF IMPACT FACTOR (2020: 5. 286) (2021: 5. 64) (2022: 6. 319) (2023: 7. 396)
OCLC – 1121105510
Publisher: The USA Journals

damage to the development of the foetus. According to statistics, about 10-15% of the total number of children born with clefts, have a genetic predisposition"[5]. This pathology is formed in the embryo before 8-12 weeks of age due to the failure of the palate and lips to fuse in time[1,6]. Congenital cleft lip and palate is more common in boys. The frequency of children born with cleft lip and palate is on average 1:800 newborns. In the most industrialised areas with developed chemical industry the frequency of births with congenital cleft lip and palate is much higher: 1:500/1:450 newborns[3,7,8]. The process of correction of congenital cleft lip and palate and the subsequent stages of rehabilitation is often complicated by a variety of combined pathologies of other organs, particularly the nervous system. Anatomical changes in the maxillofacial region lead to a persistent functional defect in all parts of voice and speech production[9,11,13]. A severe speech disorder, rhinolalia, develops, in which all aspects of speech are affected: breathing, voice, changes in the muscles of the pharynx, oral cavity and face, pathological articulation develops, phonemic hearing is impaired, and auditory perception is distorted. The severity of anatomical and functional disorders is directly related to the type of cleft upper lip[8]. Children with congenital cleft lip and palate are disabled in childhood, and until the end of the formation of the maxillofacial region, up to 14-16 years of age, are usually under the constant attention of a surgeon, orthodontist, paediatrician, neurologist, speech therapist. However, with clear, well-coordinated work of highly qualified specialists on the basis of specialised centres, with the active participation and support of parents, it is possible to significantly reduce the period of disability of children[12,15].

Purpose of the study

algorithm of treatment of congenital cleft palate and lip

Materials and methods of the study

We examined 54 children in the period of 2020-2023 in the department of paediatric maxillofacial surgery of the Tashkent Dental Institute for examination and treatment.

The treatment of this category of children is complex and multistage, with the participation of a paediatrician, maxillofacial surgeon, orthodontist and other specialists under dispensary supervision. Treatment of congenital clefts of the upper lip or palate is usually carried out in one stage, if the child is a minor - with surgical intervention, in transverse clefts - in several stages. In clefts of the upper lip or palate, the continuity of the upper jaw is not broken, but in cross clefts the upper jaw is divided into two parts (major and minor), the distance between the parts can be narrow, wide or very wide. In the alveolar arch, the small part is behind the large part and is located medially. At the end of the treatment process, all anatomo-functional changes in the child can be restored.

RESULTS OF THE STUDY

In the department of paediatric maxillofacial surgery of TDSI a child with transverse congenital anomaly of development is taken on dispensary observation from the first days of life and treatment measures are carried out according to the plan oriented on the final result. We conditionally divided the process of treatment of a child with transverse congenital defect into 5 seasons:

Season 1 - before cheiloplasty;

2nd season - before veloplasty;

The American Journal of Medical Sciences and Pharmaceutical Research
(ISSN – 2689-1026)
VOLUME 05 ISSUE 08 Pages: 39-43
SJIF IMPACT FACTOR (2020: 5. 286) (2021: 5. 64) (2022: 6. 319) (2023: 7. 396)
OCLC – 1121105510
Publisher: The USA Journals

Season 3 - before uranoplasty;

Season 4 - before rexylo-rhino-alveoplasty;

Season 5 ends with reconstructive orthognathic surgery. The maxillofacial surgeon plans and implements the timing and method of cheiloplasty surgery.

The main objectives in Season 1 are. Improving the child's feeding and breathing, separating the oral cavity from the nasal cavity, ensuring the child's physical growth and performing the cheyloplasty surgery at 6-8 months of age:

- The paediatrician artificially develops the order and volume of feeding (from the first day of life to surgery);
- The orthodontist prepares, teaches and monitors the child's preforming plate before the cheiloplasty operation;
- the oral surgeon plans and implements the timing and method of the cheiloplasty surgery.

Major tasks in the second season include ensuring the child's healthy development, continuing orthodontic treatment, and performing the bicloplasty surgery:

- monitoring the child's healthy growth with the paediatrician and timely treatment of identified somatic diseases in the child, parents are given recommendations on feeding regimen appropriate to the growth period;

- orthodontist joins the parts together using a preforming plate. Prevents the negative impact of the performed cheiloplasty operation on the development of the alveolar barrier; 434g) the maxillofacial surgeon determines the method and duration (10-12 months) of the veloplasty operation and performs it.

The main tasks in the third season are to ensure the child's healthy growth, speech therapy and uranoplasty:

- The paediatrician monitors the child's healthy growth, somatic diseases (anaemia, cardiovascular and digestive diseases, identifies diseases of organ systems, etc.) and organises their treatment;

- a paediatric dentist carries out measures aimed at caries prevention, treats and carries out prevention of caries complications;

- orthodontist treats secondary changes of the jaw with the help of plate apparatuses and mechanical apparatuses;

- after bicuspid surgery, the speech therapist teaches the child exercises for deep breathing, airflow control, correct pronunciation of some vowel and consonant sounds;

- the maxillofacial surgeon chooses the method of uroplasty and performs it according to the plan.

Prevention of secondary deformities of the jaw after uranoplasty and caries and its complications in the fourth season;

- surgical correction of postoperative lip deformities at preschool age; At 10-12 years of age, a rexylo-rhino-alveoloplasty is performed to restore the integrity of the upper jaw;

- a paediatric dentist carries out caries prevention, treats caries and its complications, assesses the hygienic condition of the oral cavity and, if necessary, monitors its improvement;

- The speech therapist regularly conducts exercises aimed at improving the child's pronunciation and

The American Journal of Medical Sciences and Pharmaceutical Research
(ISSN – 2689-1026)
VOLUME 05 ISSUE 08 Pages: 39-43
SJIF IMPACT FACTOR (2020: 5. 286) (2021: 5. 64) (2022: 6. 319) (2023: 7. 396)
OCLC – 1121105510
Publisher: The USA Journals

speech. The speech therapist teaches the correct articulation of vowels and consonants when speaking;

- an orthodontist corrects secondary deformities of the jaw with the help of plate apparatuses and mechanical apparatuses, and brings abnormally positioned teeth into place in the alveolar arch. Before performing alveoloplasty in a child, the alveolar arch of the maxilla is adjusted to the alveolar arch of the mandible and placed on retention;

- the maxillofacial surgeon performs rexylo-rhino-alveoloplasty after the completion of orthodontic treatment (10-12 years of age). After surgery, orthodontic treatment and speech therapy are continued.

Season five. Orthognathic-surgical techniques performed on the jaws to improve facial aesthetics:

- orthodontist intensively treats deformities of the upper jaw, and the bite is brought to an orthognathic state on biometric models;

- restoration of the alveolar arch of the maxilla by alveoloplasty; d) the surgeon draws up and implements an orthognathic surgical treatment plan based on cephalometric and anthropometric studies.

CONCLUSIONS

Treatment of patients with jaw deformities requires a comprehensive approach, orthodontic and surgical stages of treatment. Despite continuous improvement of surgical techniques for primary surgeries such as cheilorhinoplasty and uranoplasty, there is still a significant number of secondary deformities of the midface. Surgical correction of secondary maxillary deformities is combined with orthognathic surgical treatment.

REFERENCES

1. Аббясова О.В. Цифровые технологии в диагностике изменений структуры костной ткани зубочелюстной системы: Автореф. дис. ...канд. мед. наук. – М., 2019. – 25 с.
2. Абдукадыров А. Клиника, диагностика и лечение взрослых больных с «синдромом длинного лица»: Дис. ...канд. мед. наук. – М., 2021. – 180 с.
3. Аманулаев Р.А. Частота рождаемости детей с врожденной расщелиной верхней губы и неба в крупных регионах Узбекистана и Врожденная и наследственная патология головы, лица и шеи у детей // Актуальные вопросы комплексного лечения. – М., 2016. – С. 14-15.
4. Функционально-эстетическая реабилитация больных с врожденными расщелинами лица: Материалы конф. – М., 2022. – С. 95-96.
5. Арсенина О.И., Рабухина Н.А. Алгоритм ортодонтического лечения пациентов с резким сужением верхней зубоальвеолярной дуги // Стоматология сегодня и завтра: Материалы Всерос. науч.-практ. конф. – М.: ГЭОТАР-Медиа, 2015. – С. 183-184.
6. Арсенина О.И., Рабухина Н.А., Голубева Г.И. Клинико-рентгенологическое обоснование применения быстрого расширения верхней челюсти // Ортодонтия. – 2005. – №2(30). – С. 26-30.
7. Баландина Е.А. Факторы риска возникновения врожденной расщелины губы и неба у детей, проживающих на территории города Перми и Пермской области: Автореф. дис. ...канд. мед. наук. – Пермь, 2021. – 24 с.

The American Journal of Medical Sciences and Pharmaceutical Research (ISSN – 2689-1026)
VOLUME 05 ISSUE 08 Pages: 39-43
SJIF IMPACT FACTOR (2020: 5. 286) (2021: 5. 64) (2022: 6. 319) (2023: 7. 396)
OCLC – 1121105510
Publisher: The USA Journals

8. Безруков В.М., Набиев Ф.Х., Салиджанов А.Ш. Современные методы хирургического лечения больных с диспропорциональным соотношением челюстей // Анналы пласт., реконструктив. и эстет. хирургии. – 2000. – №1. – С. 27-33.
9. Битикенова Г.Б. Совершенствование методов комплексной реабилитации детей с врожденной расщелиной верхней губы и неба с периода новорожденности: Автореф. дис. ...канд. мед. наук. – Алма-Ата, 1995. – 19 с.
10. Богатырьков Д.В., Оспанова Г.Б., Иванова Ю.А. Раннее лечение детей с мезиальной окклюзией // Ортодонтия. – 2019. – №1(45). – С. 49.
11. Shomurodov K.E. Peculiarities of cytokine balance in gingival fluid at odontogenicphlegmon of maxillofacial area // The doctor-aspirant. - 2010. - 42(5.1). - C. 187-192.
12. Isomov M.M., Shomurodov K.E. Peculiarities of rehabilitation of pregnant women with inflammatory diseases of maxillofacial area // International scientific-practical conference "Modern aspects of complex dental rehabilitation of patients with maxillofacial defects" May 21-22, 2020, Krasnodar. - 2020. - C. 72-76.
13. Дусмухамедов М.З. Комплексное лечение детей с врожденной расщелиной неба, прогнозирование и профилактика послеоперационных осложнений: Дис. …д-ра мед. наук. – Ташкент, 2006. – 256 с.
14. Мамедов Ад.А. Комплексная реабилитация больных с небно-глоточной недостаточностью и нарушением речи после уранопластики: Автореф. дис. ...д-ра мед. наук. – Екатеринбург, 1997. – 50 с.
15. Махкамов М.Э. Дифференциальная лечебно-профилактическая тактика при лечении детей с врождённой расщелиной губы и нёба: Дис. ...д-ра мед. наук. – М., 2002. – С. 78-81.