European International Journal of Multidisciplinary Research and Management Studies

TYPE Original Research
PAGE NO. 102-105
DOI 10.55640/eijmrms-05-04-23

Check for updates

The Epidemiology, Aetiology, Prevention, And Treatment of Children with This Disease

Turaev Alimjan Bahriddinovich

Samarkand State Medical University, Uzbekistan

OPEN ACCESS

SUBMITED 20 February 2025
ACCEPTED 19 March 2025
PUBLISHED 21 April 2025
VOLUME Vol.05 Issue04 2025

Abstract: Developmental lip deformity, cleft alveolar process, and cleft palate represent some of the most challenging malformations within the maxillofacial region, with an incidence of 1 in 1000 newborns, a figure that continues to rise [3, 4, 13, 18]. The rehabilitation and care of these patients is a pressing issue due to atypical facial development, secondary abnormalities, speech and mastication difficulties, prolonged recovery periods, and the necessity for the child's social adaptability [8]. Current research discusses how to manage children with cleft lip and palate issues, and some people believe that an integrated strategy is necessary [11, 19].

Keywords: Atypical facial development, secondary abnormalities, speech and mastication difficulties, prolonged recovery periods.

Introduction: Developmental lip deformity, cleft alveolar process, and cleft palate represent some of the most challenging malformations within the maxillofacial region, with an incidence of 1 in 1000 newborns, a figure that continues to rise [3, 4, 13, 18]. The rehabilitation and care of these patients is a pressing issue due to atypical facial development, secondary abnormalities, speech and mastication difficulties, prolonged recovery periods, and the necessity for the child's social adaptability [8]. Current research discusses how to manage children with cleft lip and palate issues, and some people believe that an integrated strategy is necessary [11, 19]. Children afflicted with this disease can undergo comprehensive rehabilitation and social integration in specialised medical facilities [7, 14]. The work's goal is to show how

well orthodontists and maxillofacial surgeons can collaborate by using a challenging rehabilitation case involving a patient who has a congenital cleft palate, alveolar process, and left upper lip.

METHODS

A diagnosis of "congenital complete left-sided cleft of the upper lip, alveolar process and palate" was made for Patient I on August 5, 2003 [23]. [23]. The kid received early orthopaedic treatment based on G.V. Dolgopolova's approach, lasting from 15 days to 5 months, to correct the position of the palate. Normalising the palatine plate's position and minimising the disparity between the large and tiny pieces of the maxillary alveolar process were the goals [5]. Once this phase of treatment was finished, ureteroplasty was done at 12 months of age and primary rhinoplasty at 5 months [10, 15]. Following surgery, the patient received yearly examinations from an orthodontist and a surgeon. An irregular placement of individual teeth in the anterior maxillary region and a slight constriction of the maxillary dentition were observed at the age of eight, during the era of tooth development. The patient received a partial 2*4 bracket system to correct the axial positioning of the maxillary incisors [1, 2, 11, 16, 21]; following the alignment of teeth 1.1 and 2.1, the braces were removed, concluding a treatment duration of 11 months. The diagnosis at the point of withdrawal: "Late tooth change, narrowing and shortening of the dentition, abnormal position of individual teeth and absence of an alveolar process on the left upper jaw." In order to establish ideal conditions for alveolar osteogenesis, preparatory orthodontic therapy was subsequently carried out at the age of 10 years following consultation with an orthodontist and a maxillofacial surgeon [9, 17, 22, 25]. The patient's postoperative orthodontic therapy commenced at age 11, utilising the fixed straight arch approach. All of the permanent maxillary teeth erupted at the start of treatment, allowing the diagnosis to be established and justified: "neutral bite (molars of class I according to Engl), narrowing and shortening of the maxillary dentition, palatal position of teeth 1.2 and 2.2, excessive fullness of the tooth 2.2, and the absence of an alveolar process on the left side of the upper jaw." There were multiple phases to the additional treatment: 1. Active orthodontic treatment stage (12/25/2014): teeth 1.2 and 2.2 were placed, Gemini braces were put in, and CuNiTi 0.014, CuNiTi 0.016, and CuNiTi 0.016*022 arches were horizontally aligned to generate space. Following the first stage, which involved switching to the SS 0.016*022 arc, a maxillofacial surgeon inspected the patient and decided on the alveolar osteoplasty strategy. 2. During the surgical phase (05.04.2016), a bone autograft from the iliac crest and a Bio-Gide biodegradable membrane were employed to address the paraphyseal deficiency of the alveolar bone, utilising a technique established at the Bonum Medical Centre [6, 12, 20, 24]. To create a bed for the implantation of a bone autograft, a muco-periosteal flap that had been intraoperatively removed and mobilised was sewn. A biodegradable Bio-Gide membrane, with both smooth and rough surfaces, was positioned on the soft tissues 1-2 mm from the bone border to facilitate the installation of a bone graft. After placing the bone autograft (good iliac bone) on a bed that had been prepared, it was covered with an absorbable BioGide membrane that overlapped the edge of the bone defect by 1-2 mm and had a rough surface compared to the bone. The membrane was secured under mild pressure during the coagulation of blood. The area beneath the membrane is essential for bone repair and the maintenance of the blood clot. A muco-rib flap was utilised on the absorbable membrane, and the wound was sealed and sutured. Following surgery, the teeth's proportions and bite restored to normal. Considering the preferences of the patient and parents, the decision was made to remove the bracket system and put fixed retainers on the upper teeth. The aggressive orthodontic therapy and alveolar osteoplasty required a duration of 18 months. The outcome of an intricate rehabilitation process is depicted in the picture. The patient underwent all rehabilitation from specialised professionals, including a paediatric dentist, ENT physician, neurologist, and speech therapist, up to the age of 15, during dynamic follow-up at the Bonhomme International International Medical Centre. An evaluation of face aesthetics was conducted when the patient was taken off dynamic observation. A minor facial asymmetry was evident due to scars after jaw surgery; nonetheless, the profile remained straight. The patient and her mother assessed the appearance as satisfactory. The speech therapist assessed the child's speech as satisfactory.

CONCLUSION

Using the most recent technologies created at the International Medical Centre (early orthognathic treatment of the author, alveolar osteogenesis with a bio-controlled biodegradable membrane) in conjunction with a conventional non-removable orthodontic device, this case illustrates the collaboration of orthodontists and maxillofacial surgeons. For children with congenital cleft lip, alveolar process, and cleft palate, such an integrated approach guarantees prompt rehabilitation with successful outcomes.

REFERENCE

Asrorovna X. N. et al. Clinical Application Of Dental Photography By A Dentist //The American Journal of Medical Sciences and Pharmaceutical Research. – 2021. – Т. 3. – №. 09. – С. 10-13.

Astanovich A. D. A. et al. The State of Periodontal Tissues in Athletes Engaged in Cyclic Sports //Annals of the Romanian Society for Cell Biology. – 2021. – С. 235-241.

Shuxratovich S. S. et al. The Country Of Dental Implanting, The Risks Involved //The American Journal of Medical Sciences and Pharmaceutical Research. – 2021. – Т. 3. – №. 09. – С. 142-146.

Asrorovna X. N. et al. Methods Of Instrumental Treatment of Root Canals //Texas Journal of Medical Science. – 2021. – Т. 2. – С. 17-19.

Asrorovna X. N. et al. Clinical Application Of Dental Photography By A Dentist //The American Journal of Medical Sciences and Pharmaceutical Research. – 2021. – Т. 3. – №. 09. – С. 10-13.

Шукурова Н. Т., Муратова С. К., Тураев А. Б. Врачебная тактика при диагностике туберкулеза полости рта //Вестник науки и образования. – 2020. – №. 18-2 (96). – С. 86-91.

Тураев А. Б., Муратова С. К., Джавадова Л. М. Повышение эффективности лечения заболеваний пародонта с применением местно действующего препарата" пародиум" //Современные достижения стоматологии. – 2018. – С. 116-116.

Fakhriddinovna A. N. et al. Platelet condition in children with congenital cleft palate in chronic foci of infection //Достижения науки и образования. – 2019. – №. 12 (53). – С. 113-115.

Zoirov T. E. et al. The influence of hypertension on the Pro-oxidant capacity and lipid peroxidation in oral fluid //Central Asian Journal of Medical and Natural Science. – 2021. – Т. 2. – №. 2. – С. 46-52.

Абсаламова Н., Содикова Ш., Гулбоева З. ПРОГРАММА ДЛЯ ОПРЕДЕЛЕНИЯ ВЫБОРА МЕСТНОЙ ТЕРАПИИ ПРИ ВОСПАЛИТЕЛЬНЫХ ЗАБОЛЕВАНИЙ ПАРОДОНТА БЕРЕМЕННЫХ ЖЕНЩИН С ЖЕЛЕЗОДЕФИЦИТНОЙ АНЕМИЕЙ //Медицина и инновации. – 2021. – Т. 1. – №. 4. – С. 536-539.

Тураев А. Б. и др. ВЛИЯНИЕ ОРТОДОНТИЧЕСКИХ АППАРАТОВ НА ПАРОДОНТ //TADQIQOTLAR. UZ. – 2024. – Т. 31. – №. 4. – С. 61-64.

Муродилло Т. А. В. Х. Т. и др. PERIODONTAL TISSUE CHANGES IN PATIENTS WITH INFECTIOUS VIRAL DISEASES //Journal of Modern Educational Achievements. – 2024. – Т. 1. – №. 1. – С. 223-228.

Bahriddinovich T. A. POSITIVE AND NEGATIVE PROPERTIES OF BRACES IN THE TREATMENT OF DENTAL ANOMALIES //Journal of Modern Educational Achievements. – 2024. – Т. 1. – №. 1. – С. 195-199.

Bahriddinovich T. A. COMPLEX TREATMENT OF STOMATITIS IN SCHOOL-AGE CHILDREN //Journal of Modern Educational Achievements. – 2023. – Т. 5. – №. 5. – С. 100-103.

Sevinch E., Zarafruz B. ETIOLOGICAL TREATMENT FEATURES INFLAMMATORY PERIODONTAL DISEASE //European International Journal of Multidisciplinary Research and Management Studies. – 2024. – Т. 4. – №. 03. – С. 241-246.

Yusufboy S., Qobilovna B. Z. FEATURES OF THE STRUCTURE OF COPD IN ELDERLY PATIENTS //European International Journal of Multidisciplinary Research and Management Studies. – 2024. – Т. 4. – №. 05. – С. 363-368.

Sevinch E., Qobilovna B. Z. A STUDY ON THE MORPHOFUNCTIONAL STATE OF ORAL ORGAN TISSUES DURING THE USE OF NON-REMOVABLE ORTHODONTIC STRUCTURES //European International Journal of Multidisciplinary Research and Management Studies. – 2024. – Т. 4. – №. 03. – С. 247-253.

Shaximardonova E. S., Kobilovna B. Z. RED LICHEN PLANUS OF THE ORAL MUCOSA AND ITS CLINICAL ANALYSIS OF A PATIENT WITH, ASSOCIATED WITH THE EPSTEIN—BARR VIRUS //European International Journal of Multidisciplinary Research and Management Studies. – 2024. – Т. 4. – №. 01. – С. 272-279.

Yusufboy S., Qobilovna B. Z. STUDY OF CHANGES IN THE ORAL CAVITY IN ENDOCRINE DISEASES //European International Journal of Multidisciplinary Research and Management Studies. – 2024. – Т. 4. – №. 05. – С. 357-362.

Yusufboy S., Qobilovna B. Z. SOCIAL AND DENTAL SURVEY OF PATIENTS TECHNOLOGY OF OLDER AGE GROUPS SUFFERING WITH ACUTE LEUKEMIA //European International Journal of Multidisciplinary Research and Management Studies. – 2024. – Т. 4. – №. 05. – С. 352-356.

Muxtasar A. MODERN PROTOCOL FOR CLINICAL AND FUNCTIONAL RESEARCH AND PREVENTION OF TEMPOROMANDIBULAR JOINT DISORDERS //European International Journal of Multidisciplinary Research and Management Studies. – 2024. – Т. 4. – №. 02. – С. 232-238.

Muxtasar A. A COMPARATIVE EVALUATION OF ORTHOPEDIC TREATMENT FOR PARTIAL DEFECTS OF DENTAL ROWS USING DIGITAL TECHNOLOGIES //European International Journal of Multidisciplinary Research and Management Studies. – 2024. – Т. 4. – №. 03. – С. 254-257.

Shaxnoza T., Qobilovna B. Z. COMPREHENSIVE

TREATMENT OF PERIODONTAL DISEASES USING LOW-INTENSITY MAGNETIC LASER RADIATION //European International Journal of Multidisciplinary Research and Management Studies. – 2024. – Т. 4. – №. 02. – С. 137-144.

Nigora N., Kobilovna B. Z. EARLY SIGNS AND RISK FACTORS FOR THE DEVELOPMENT OF THE ARTICULAR FORM OF TRANSVERSAL OCCLUSION ANOMALY //European International Journal of Multidisciplinary Research and Management Studies. – 2024. – Т. 4. – №. 02. – С. 93-98.

Mukhtasar A. Changes in immunological indicators of the oral liquids in children at the stages of orthodontic treatment //Thematics Journal of Education. – 2022. – Т. 7. – №. 3.

Mukhtasar A. Changes in the order of orthodonic treatment in children's oral fluid homestast instructions //Thematics Journal of Education. – 2022. – Т. 7. – №. 3.

Ulug'bek X., Kobilovna B. Z. STUDY OF COMPOSITE MATERIAL SAMPLES0 //European International Journal of Multidisciplinary Research and Management Studies. – 2024. – Т. 4. – №. 02. – С. 115-119.

Qobilovna B. Z. Nodirovich EA EVALUATION OF ORTHOPEDIC TREATMENT WITH REMOVABLE DENTAL PROSTHESES FOR PATIENTS WITH PAIR PATHOLOGY //Spectrum Journal of Innovation, Reforms and Development. – 2023. – Т. 11. – С. 95-101.

Anvarovich E. S., TYPES Q. B. Z. I. O. F. D. OF RETRACTION THREADS ON THE DEGREE OF GINGI RECESSION //Spectrum Journal of Innovation, Reforms and Development. – 2023. – Т. 11. – С. 84-86.

Tavakalova Q. M., Qobilovna B. Z., Sarvinoz Y. Preventive Measures in the Treatment of Caries in School children //Eurasian Research Bulletin. – 2023. – Т. 17. – С. 60-65.

Tohirovna M. L., Qobilovna B. Z. Optimization of Complex Methods Treatment of Inflammatory Periodontal Diseases //Eurasian Research Bulletin. – 2023. – Т. 17. – С. 138-143.

Qobilovna B. Z., Maxzuna U. Improvement of Providing Therapeutic Dental Care to Pregnant Women. Therapeutic and Preventive Measures //Eurasian Research Bulletin. – 2023. – Т. 16. – С. 146-150.