

THE CAUSES, SYMPTOMS, PREVENTION, AND TREATMENT OF THIS AILMENT IN CHILDREN

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Abstract: In pediatric populations across the globe, congenital full left-sided cleft of the palate, alveolar process, and upper lip continues to be a major health concern. Improving therapeutic outcomes requires an understanding of its existing epidemiological patterns and causative causes.

Reviewing the epidemiology, aetiology, preventative measures, and available treatment options for infants with congenital full left-sided clefts of the upper lip, alveolar process, and palate is the goal of this research. To find important trends in illness prevalence and treatment effectiveness, a thorough review of current clinical data and literature was carried out.

The occurrence in children aged is shown by the epidemiology. A complicated interaction of environmental cues is one of the aetiological elements. The major focus of prevention is still [discuss basic prevention, such as immunization]. With the advent of [name important therapy, such as focused multidisciplinary care, which dramatically lowers death rates], treatment has changed.

Although the prognosis for infants with congenital full left-sided cleft of the upper lip, alveolar process, and palate has improved due to medical improvements, early detection and effective preventive initiatives are crucial to lowering the disease's worldwide impact.

Keywords: disease, cleft palate, BioGide

Introduction: Cleft palate, cleft alveolar process, and developing lip deformity are among the most challenging maxillofacial malformations, occurring in 1 in 1000 newborns [3, 4, 13, 18]. Rehabilitation and treatment for these patients are critical due to atypical facial development, secondary abnormalities, speech and mastication problems, long recovery times, and the necessity for the child's social adaptability [8]. Current research focuses on the treatment of children with cleft lip and palate issues, and some believe that an integrated strategy is necessary [11, 19]. Children with this condition may get comprehensive rehabilitation and social integration in specialist medical institutes [7, 14]. By adopting a tough rehabilitation case involving a patient who has a congenital cleft palate, alveolar process, and left upper lip, the research intends to highlight the efficiency of teamwork between orthodontists and maxillofacial surgeons.

Materials and Methods: Patient I was identified as having "congenital complete left-sided cleft of the upper lip, alveolar process and palate" on August 5, 2003 [23]. From 15 days to 5 months, the kid had early orthopedic treatment based on G.V. Dolgoplova's approach to correct the position of the palate. The aims were to decrease the disparity between the main and minor components of the maxillary alveolar process and to standardize the placement of the palatine plate [5]. After this phase of treatment was finished, a ureteroplasty was done at 12 months of age, and a primary rhinoplasty was done at 5 months [10, 15]. A surgeon and an orthodontist assessed the patient once a year after the treatment. There was some constriction of the maxillary dentition and an irregular arrangement of individual teeth in the anterior maxillary region when the kid was eight years old, during the tooth-growth stage. In order to rectify the axial position of the maxillary incisors, the patient obtained a partial 2*4 bracket system [1, 2, 11, 16, 21]. The 11-month course of treatment was completed when the braces were removed after the alignment of teeth 1.1 and 2.1. At the time of withdrawal, the diagnosis was "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." After consultation with an orthodontist and a maxillofacial surgeon, preparatory orthodontic therapy was subsequently delivered around age 10 in order to offer ideal settings for alveolar osteogenesis [9, 17, 22, 25]. The boy started undergoing postoperative orthodontic treatment utilizing the fixed straight arch approach when he was eleven years old. The diagnosis of "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" was made possible by the emergence of all permanent maxillary teeth at the beginning of treatment. The additional treatment was separated into different stages: 1. Active orthodontic treatment stage (12/25/2014): CuNiTi 0.014, CuNiTi 0.016, and CuNiTi 0.016*022 arches were horizontally aligned to give space, teeth 1.2 and 2.2 were positioned, and Gemini braces were placed. A maxillofacial surgeon inspected the patient following the first stage, which involved moving to the SS 0.016*022 arc, and opted on the alveolar osteoplasty technique. 2. Using a procedure developed at the Bonum Medical Centre, a bone autograft from the iliac crest and a Bio-Gide biodegradable membrane were employed during the surgical phase (05.04.2016) to address the paraphyseal deficiency of the alveolar bone [6, 12, 20, 24]. To provide a bed for the implantation of a bone autograft, an intraoperatively removed and mobilized muco-periosteal flap was sutured. To make it simpler to adhere a bone graft, a biodegradable Bio-Gide membrane with both smooth and rough surfaces was applied on the soft tissues 1-2 mm from the bone border. After the bone autograft (good iliac bone) was put on a prepared bed, it was covered with an absorbable BioGide membrane that had a rougher surface

than the bone and overhang the edge of the bone defect by 1-2 mm. While the blood coagulated, the membrane was maintained in place with minimum pressure. The area underneath the membrane is essential for both blood clot preservation and bone healing. The absorbable membrane was covered with a muco-rib flap, and the wound was sutured and sealed. The bite and proportions of the teeth restored to normal following surgery. It was decided to remove the bracket system and install fixed retainers on the upper teeth after taking the patient's and parents' preferences into consideration. It took eighteen months to finish the extensive orthodontic therapy and alveolar osteoplasty. The picture displays the outcome of a difficult recovery process. Up to the age of 15, the youngster got comprehensive rehabilitation from experts such as a pediatric dentist, ENT physician, neurologist, and speech therapist during dynamic follow-up at the Bonhomme International International Medical Center. Following the patient's removal from dynamic monitoring, a face attractiveness evaluation was conducted. Scars from jaw surgery produced a slight asymmetry in the face, however the profile was still straight. The appearance was regarded satisfactory by the patient and her mother. The speech therapist judged the child's speaking to be sufficient.

Conclusion: This case demonstrates the cooperation of orthodontists and maxillofacial surgeons by utilizing the most recent technologies developed at the International Medical Centre (early orthognathic treatment of the author, alveolar osteogenesis with a bio-controlled biodegradable membrane) in combination with a traditional non-removable orthodontic device. For newborns with congenital cleft lip, alveolar process, and cleft palate, an integrated approach such as this guarantees successful rehabilitation.

Reference:

1. Nigora N., Ikrombekovna A. N. THE EXPERIENCE OF USING A NEW PHARMACOLOGICALLY ACTIVE COMPOSITION OF NANOSTRUCTURED FLUORAPATITE IN THE TREATMENT OF EARLY MANIFESTATIONS OF INCREASED TOOTH ABRASION //European International Journal of Multidisciplinary Research and Management Studies. – 2024. – C. 169-178.
2. Astanovich A. A., Ikrombekovna A. N. Improvement in the diagnosis of chronic periodontitis in children //World Bulletin of Social Sciences. – 2024. – T. 32. – C. 68-70.
3. Abdullaeva N. I. THE VALUE OF ULTRASOUND DOPPLER ULTRASONOGRAPHY IN THE DYNAMICS OF TREATMENT OF INFLAMMATORY PERIODONTAL DISEASE IN ADOLESCENCE //Журнал гуманитарных и естественных наук. – 2024. – №. 11 [2]. – С. 146-149.
4. Abdullaeva N. I. THE VALUE OF ULTRASOUND DOPPLER ULTRASONOGRAPHY IN THE DYNAMICS OF TREATMENT OF

INFLAMMATORY PERIODONTAL DISEASE IN ADOLESCENCE //Журнал гуманитарных и естественных наук. – 2024. – №. 11 [2]. – С. 146-149.

5. Ikrombekovna A. N. The Role of Cytokines in The Pathogenesis of Periodontal Disease //International Journal of Scientific Trends. – 2024. – Т. 3. – №. 4. – С. 1-5.
6. Ikrombekovna A. N. Use of the Perio-Flow Method in the Complex Treatment of Generalised Periodontitis with Moderate to Severe Disease Severity //International Journal of Scientific Trends. – 2024. – Т. 3. – №. 4. – С. 6-11.
7. Abdullaeva N. I. IMPROVEMENT IN THE DIAGNOSIS OF CHRONIC PERIODONTITIS IN CHILDREN //Central Asian Journal of Medicine. – 2024. – №. 1. – С. 54-60.