EIJMRMS ISSN: 2750-8587

EUROPEAN INTERNATIONAL JOURNAL OF MULTIDISCIPLINARY RESEARCH AND MANAGEMENT STUDIES

VOLUME04 ISSUE05

DOI: https://doi.org/10.55640/eijmrms-04-05-58



MODERN DIAGNOSTIC METHODS IN CHILDREN WITH FALSE MESIAL OCCLUSION

Rustamov Arslanbek Alisherovich

Clinical Resident of the Department of Orthopedic Dentistry, Samarkand State Medical University,
Uzbekistan

Akhmedov Alisher Astanovich

Clinical Resident of the Department of Orthopedic Dentistry, Samarkand State Medical University, Uzbekistan

ABOUT ARTICLE

Key words: Facial skeleton, X-ray cephalometric, Department of Orthodontics.

Received: 21.05.2024 **Accepted:** 26.05.2024 **Published:** 31.05.2024 **Abstract:** In the last decade, mesial occlusion has been studied in many countries through the use of modern diagnostic technologies for the timely treatment of this anomaly. The basis for diagnosis is an X-ray cephalometric examination of the facial skeleton, which allows us to identify the leading pathogenetic mechanisms and conduct differential diagnosis of combined forms of anomaly, which cannot be carried out on the basis of clinical data alone (N.G.Abolmasov, 1982; E.N.Zhulev, 1986, etc.).

Pages: 376-381

INTRODUCTION

According to WHO, anomalies of the maxillofacial region in the USA occur in 65% of cases, in European countries - 59.4%, in various regions of Russia they occur with a frequency of 30.9 to 76.5%, and in Uzbekistan they are observed in 62% of cases.

Much attention has been paid to the study of the issues of diagnosis and treatment planning for one of the most severe forms of dentition closure anomaly - mesial occlusion in the special literature (F.Ya.Khoroshilkina, 1976; H.A.Kalamkarov, 1981; N.G.Abolmasov, 1982; L.S.Persin, 1983; E.N. Zhulev, 1986; A.S.Shcherbakov, 1987; N. Friede, 1987; Yu.A.Gioeva, 1991; O.S.Balgurina, 1996 and others).

VOLUME04 ISSUE05 376

S.S. Murtazaev (2017) based on specialized cephalograms proved the peculiarity of the structure of the facial skeleton, spatial orientation, as well as the interjaw, maxillary and interdental relationships among representatives of the Uzbek population with normal bite and formed dentitions.

ISSN: 2750-8587

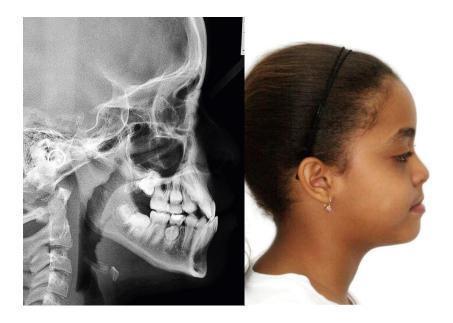
Objective: To evaluate modern diagnostic methods for the treatment of patients with mesial occlusion

METHODS

The study was conducted at the TSSI at the Department of Orthodontics for a year. 57 patients were examined, including 37 (62.7%) girls and 22 (37.2%) boys aged 6 to 12 years.

To study the mesial occlusion, we conducted a clinical examination of the oral cavity. For diagnostic analysis (OPTG, 3D X-ray, TRG) were used

Fig.1. A 12–year-old patient - Photometry and TRG (1-2)



VOLUME04 ISSUE05

EUROPEAN INTERNATIONAL JOURNAL OF MULTIDISCIPLINARY RESEARCH AND MANAGEMENT STUDIES





RESULT

During the examination of patients with false progenia, a clinical examination of the oral cavity was performed. Based on these clinical studies, a TRG analysis was performed. According to the results of the analysis, it was determined that (ANB=2), (SN.GoGn = $40 \circ$, FMA = $29 \circ$) protrusion of the incisors of the lower jaw (IMPA = $99 \circ$, 1.NB = $35 \circ$), retraction of the incisors of the lower jaw (1.NA = $18 \circ$, 1-NA=1mm) and the protrusion of the lower lip (Ricketts E-line 3 mm)

ISSN: 2750-8587

The pathogenesis of pseudomesial occlusion is based on violations of the size and shape of the structures of the skeleton of the head, as well as violations of their mutual adaptation to each other. In the foreground in the structure of the facial skeleton are an increase in the height of the part of the face and the interdigital angle, a decrease in the depth of the face, shortening and distal displacement of the upper jaw. In the lower jaw, the leading pathogenetic sign is a tendency to its excessive development mesially.

CONCLUSION

Cephalometric analysis of the structure of the facial skeleton in case of pseudomesial occlusion made it possible to clarify its main forms and their distribution. Mesial occlusion caused by macronathia of the mandible is most common (18.8%). A combination of micrognathia and retrognathia of the upper jaw is somewhat less common (16%). Prognathia of the mandible was detected by us in 13.8%.

VOLUME04 ISSUE05 378

EUROPEAN INTERNATIONAL JOURNAL OF MULTIDISCIPLINARY RESEARCH AND MANAGEMENT STUDIES

Macrognathia of the mandible in combination with retrognathia of the upper jaw was observed in 10% of the subjects.

ISSN: 2750-8587

Treatment planning for mesial occlusion should be based on anthropomechanical, X-ray studies, as they are the basis during the study of patients with sagittal anomaly, a differentiated approach to choosing the design of the device and a set of myohymnastic exercises depending on the features of the pathogenesis of the anomaly.

REFERENCE

- **1.** Абдуллаева П. Р., Ахмедов А. А. СПОСОБ ЛЕЧЕНИЯ ИШЕМИЧЕСКИХ СОСТОЯНИЙ ЗРИТЕЛЬНОГО НЕРВА И СЕТЧАТКИ (ЛИТЕРАТУРНЫЙ ОБЗОР): Medical science //Ethiopian International Journal of Multidisciplinary Research. 2023. Т. 10. №. 09. С. 18-23.
- 2. Ризаев Ж. А., Ахмедов А. А. ОСНОВЫ СТОМАТОЛОГИЧЕСКОЙ ПОМОЩИ В РЕСПУБЛИКЕ УЗБЕКИСТАН НА ОСНОВЕ РАЗВИТИЯ ОБЩЕЙ ВРАЧЕБНОЙ ПРАКТИКИ //ЖУРНАЛ СТОМАТОЛОГИИ И КРАНИОФАЦИАЛЬНЫХ ИССЛЕДОВАНИЙ. 2023. Т. 4. №. 3.
- 3. Абдуллаева Н. И., Ахмедов А. А. ОСТЕО-ИММУНОЛОГИЧЕСКИЙ СТАТУС ПАЦИЕНТОВ С ЗАБОЛЕВАНИЙ ПАРОДОНТА В ПОДРОСТКОВОМ И МОЛОДОМ ВОЗРАСТЕ //TA'LIM VA RIVOJLANISH TAHLILI ONLAYN ILMIY JURNALI. 2023. Т. 3. №. 11. С. 143-149.
- **4.** Ахмедов А. А. Иммунологические аспекты патогенеза гингивита и пародонтита //IQRO. 2023. Т. 3. №. 2. С. 121-123.
- 5. Ризаев Ж. А., Ахмедов А. А. GROWTH AND DEVELOPMENT OF GENERAL MEDICAL PRACTICE IN THE REPUBLIC OF UZBEKISTAN TO IMPROVE DENTAL CARE //ЖУРНАЛ СТОМАТОЛОГИИ И КРАНИОФАЦИАЛЬНЫХ ИССЛЕДОВАНИЙ. 2023. Т. 4. № 3.
- **6.** Ахмедов A. A., Нарзиева H. DENTAL PROSTHETICS ON IMPLANTS AND THEIR FEATURES //American Journal of Pedagogical and Educational Research. 2023. Т. 16. С. 132-135.
- **7.** 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. C. 235-241.
- 8. Alimjanovich R. J., Astanovich A. A. СОВЕРШЕНТСВОВАНИЕ СТОМАТОЛОГИЧЕСКОЙ ПОМОЩИ В УЗБЕКИСТАНЕ С ИСПОЛЬЗОВАНИЕМ КОНЦЕПТУАЛЬНОГО ПОДХОДА ДЛЯ УЛУЧШЕНИЕ ЕЕ КАЧЕСТВА //JOURNAL OF BIOMEDICINE AND PRACTICE. 2023. Т. 8. №. 4.
- 9. Ортикова Н. Глобализация биоэтики в период пандемии COVID-19 //Общество и инновации.– 2020. Т. 1. №. 1/S. С. 677-682.
- **10.**Ортикова Н. Влияние психоэмоционального напряжения детей на состояние здоровья полости рта //Общество и инновации. 2023. Т. 4. №. 7/S. С. 328-333.

VOLUME04 ISSUE05

- ISSN: 2750-8587
- **11.**Ортикова Н. Х., Ризаев Ж. А., Мелибаев Б. А. ПСИХОЛОГИЧЕСКИЕ АСПЕКТЫ ПОСТРОЕНИЯ СТОМАТОЛОГИЧЕСКОГО ПРИЕМА ПАЦИЕНТОВ ДЕТСКОГО ВОЗРАСТА //EDITOR COORDINATOR. 2021. C. 554.
- **12.**Ортикова Н. Тенденция эффективности профилактических мероприятий путем коррекции психологического стресса у детей на стоматологическом приёме //Общество и инновации. 2022. Т. 3. №. 6. С. 181-189.
- **13.** Qobilovna B. Z., Nodirovich E. A. EVALUATION OF ORTHOPEDIC TREATMENT WITH REMOVABLE DENTAL PROSTHESES FOR PATIENTS WITH PAIR PATHOLOGY //Spectrum Journal of Innovation, Reforms and Development. 2023. T. 11. C. 95-101.
- **14.** Anvarovich E. S., Qobilovna B. Z. INFLUENCE OF DIFFERENT TYPES OF RETRACTION THREADS ON THE DEGREE OF GINGI RECESSION //Spectrum Journal of Innovation, Reforms and Development. 2023. T. 11. C. 84-86.
- **15.**Tohirovna M. L., Qobilovna B. Z. Optimization of Complex Methods Treatment of Inflammatory Periodontal Diseases //Eurasian Research Bulletin. 2023. T. 17. C. 138-143.
- **16.** Tavakalova Q. M., Qobilovna B. Z., Sarvinoz Y. Preventive Measures in the Treatment of Caries in School children //Eurasian Research Bulletin. 2023. T. 17. C. 60-65.
- **17.**Исламова Н., Чакконов Ф. Роль продуктов перекисного окисления липидов и противовоспалительных цитокинов крови в развитии заболеваний полости рта при гипотиреозе //Общество и инновации. 2020. Т. 1. №. 1/s. С. 577-582.
- **18.** Fakhriddin C., Shokhruh S., Nilufar I. ENDOKANAL PIN-KONSTRUKSIYALARNI ISHLATISHDA ASORATLAR VA XATOLAR TAHLILI //JOURNAL OF BIOMEDICINE AND PRACTICE. 2022. T. 7. № 1.
- **19.**Shoxrux S., Shoxrux I., Faxriddin C. PREVENTION AND TREATMENT OF ORAL INFECTIONS IN DENTURE WEARERS //International Journal of Early Childhood Special Education. 2022. T. 14. №. 4.
- **20.**Xusanovich C. F. COMPLETE REMOVABLE PROSTHESIS SUPPORTED BY IMPLANTS //European International Journal of Multidisciplinary Research and Management Studies. 2023. T. 3. №. 11. C. 127-133.
- **21.** Xusanovich C. F. et al. PROSTHETICS A COMPLETE REMOVABLE PROSTHESIS BASED ON IMPLANTS //European International Journal of Multidisciplinary Research and Management Studies. 2023. T. 3. №. 11. C. 122-126.

VOLUME04 ISSUE05

EUROPEAN INTERNATIONAL JOURNAL OF MULTIDISCIPLINARY RESEARCH AND MANAGEMENT STUDIES

22.Najmiddinovich S. N. et al. CARIES IN SCHOOL CHILDREN AND TREATMENT PREVENTIVE MEASURES //American Journal of Pedagogical and Educational Research. – 2023. – T. 16. – C. 44-49.

ISSN: 2750-8587

- **23.**Khusanovich K. B. R. C. F. TYPES AND APPLICATIONS OF DENTAL COMPLIMENTS //Journal of Modern Educational Achievements. 2023. T. 5. №. 5. C. 95-99.
- **24.**Zarnigor J. MAIN ROLE OF HYGIENIC EDUCATION IN THE SYSTEM PRIMARY PREVENTION OF DENTAL DISEASES OF PATIENT //European International Journal of Multidisciplinary Research and Management Studies. 2023. T. 3. №. 11. C. 157-163.
- **25.** Qizi J. Z. B. METHODS OF OPTIMIZATION OF TREATMENT OF PERIODONTAL DISEASES USING NEW TECHNOLOGIES //European International Journal of Multidisciplinary Research and Management Studies. − 2023. − T. 3. − №. 10. − C. 234-241.
- **26.** Kobilovna B. Z., Rushana R. COMPARATIVE EVALUATION OF PARTIAL DENTURES WITH VARIOUS FASTENING ELEMENTS //Intent Research Scientific Journal. 2023. T. 2. №. 9. C. 98-103.
- **27.** Qobilovna B. Z., Maxzuna U. Improvement of Providing Therapeutic Dental Care to Pregnant Women. Therapeutic and Preventive Measures //Eurasian Research Bulletin. 2023. T. 16. C. 146-150.
- **28.** Tavakalova Q. M., Qobilovna B. Z., Sarvinoz Y. Results of the Prevention Program Dental Diseases in School-Age Children //Eurasian Research Bulletin. 2023. T. 17. C. 50-54
- **29.** Jurabek T. D., Qobilovna B. Z. Principles of Prevention of Dental Diseases in Children in Modern Conditions //Eurasian Research Bulletin. 2023. T. 17. C. 55-59.
- **30.** Tavakalova Q. M., Qobilovna B. Z., Sarvinoz Y. Preventive Measures in the Treatment of Caries in School children //Eurasian Research Bulletin. 2023. T. 17. C. 60-65

VOLUME04 ISSUE05 381