

Correction of Mesial Bite in Growing Patients: Clinical Experience and Opportunities for Early Treatment

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Abstract:

Mesial bite (prognathia mandibularis) is one of the most complex anomalies of the dentoalveolar system, requiring early diagnosis and timely correction. In growing patients, due to the active growth of the facial skeleton, it is possible to achieve a stable result in a relatively short time using functional and orthopedic appliances. This article presents a clinical case of successful correction of mesial bite in a child with appliance therapy. Despite language and financial barriers, clinical experience demonstrates that even in the conditions of Central Asia, modern treatment methods can be effectively applied.

Introduction: Mesial bite (Class III by Angle) is characterized by maxillary retrusion or excessive mandibular growth, leading to anterior crossbite. According to the literature, the prevalence of this pathology ranges from 1 to 5% in different populations. Early correction in children is of crucial importance, as it allows for the guidance of jaw growth and prevention of severe skeletal deformities in adulthood.

Materials and Methods: Patient: 14-year-old child diagnosed with 'mesial bite'.

Complaints: esthetic defect, difficulty biting food.

Diagnostic methods:

- Clinical examination
- Analysis of dental casts
- Cephalometric study

Treatment approach:

- Use of functional appliances (e.g., reverse arch or Delaire face mask)
- Removable appliances with inclined planes to stimulate maxillary growth
- Growth control using serial radiographs