

20. DENTAL TRANSPOSITION: DIAGNOSTIC CONDUCT AND TREATMENT IN ADULTS



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Introduction. Dental transposition is a rare dental anomaly involving the misalignment and positional exchange of two adjacent teeth within the same dental arch. Although it has a low incidence rate (0.33%), the orthodontic realignment challenges posed by this anomaly, particularly in adult patients, can present a genuine challenge for orthodontists.

Aim of study. To determine predisposing factors and diagnostic methods to enhance interdisciplinary treatment for patients with dental transpositions.

Methods and materials. The study encompassed 5 patients (4 females and 1 male) aged between 19 and 32 years, who sought orthodontic consultation due to complaints of dental crowding and dentoalveolar disharmony. The inclusion criterion was the clinical and radiological presence of partial or complete dental transposition.

Results. Patients underwent clinical and paraclinical examinations and received orthodontic treatment lasting between 17 to 32 months, with an average duration of 23 months. Treatment in all cases involved a dual-jaw fixed adhesive system. Incomplete dental transposition transformed into complete transposition was the functional and aesthetic choice for treating adult patients. The prevalence of dental transposition among orthodontic patients was 0.54%.

Conclusion. Orthodontic correction of transposition is suitable for cases of incomplete transposition involving only the dental crown. Identifying predisposing factors and hereditary factors is crucial for treatment predictability. Treatment method selection relies on radiological examination, allowing three-dimensional visualization of the dental apex projection. Partial transposition in adult patients is often transformed to total transposition, where orthodontic treatment is complemented by restorative therapy.