

## 50. PREDISPOSING FACTORS IN THE DEVELOPMENT OF TRANSVERSE MALOCCLUSIONS



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**Introduction.** Transverse malocclusions represent conditions that encompass a discrepancy in the alignment of teeth and maxillae in the transverse plane. Their etiology involves multiple aetiological factors that interact with each other. Knowing and identifying them in daily practice constitutes one of the key elements in establishing an accurate diagnosis and devising an individualized and successful treatment plan.

**Aim of study.** To emphasize the importance of predisposing factors in the development of transverse malocclusions.

**Methods and materials.** The specialized literature sources studied for this review were selected through scientific databases: PubMed, Google Scholar, Research Gate, and ScienceDirect. The following keywords were used: predisposing factors, transverse malocclusions, crossbite.

**Results.** The study of specialized literature highlighted the impact of vicious habits, such as: poor posture, thumb or object sucking, and interposition of the tongue between the dental arches, on the development of transverse malocclusions. However, several authors ascribe a more significant role to oral breathing, resulting from nasal airway obstruction, and atypical swallowing. The impact of these predisposing factors lies in the disruption of the balance between the forces exerted on the dental arches by the extraoral and intraoral musculature. Adaptive modifications occur at the level of the mandible, tongue, buccinator and orbicularis oris muscles, which subsequently lead to repercussions on the development of the dento-maxillary apparatus and the onset of changes in both the transverse and vertical as well as sagittal planes

**Conclusion.** Oral vicious habits, oral breathing and atypical swallowing are among the factors that predispose or aggravate transverse malocclusions depending on the intensity, duration and frequency with which they are performed. This underscores the importance of early detection of these factors and the need for an interdisciplinary approach in order to prevent or treat already established malocclusions.