

Dento-Maxillary Anomalies and Temporomandibular Dysfunctions, Cause-Effect Relationship?

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Abstract

The present study is a literature review aimed at analyzing the existing scientific evidence on the relationship between temporomandibular disorders (TMD) and malocclusion over the past 10 years. Although a link between both conditions has long been believed, no consensus has yet been reached. A search was conducted in the PubMed and SciELO databases, selecting 13 articles published between 2015 and 2025 that met strict inclusion criteria. The results reveal that, while a causal relationship cannot be established, malocclusion may act as a predisposing factor. Moreover, certain types of malocclusions—such as Class II, deep bite, and crossbite—appear to be more strongly associated with the development of TMD. However, the significant heterogeneity in diagnostic methods and the predominance of cross-sectional study designs limit the ability to establish a cause-and-effect relationship. In conclusion, malocclusions should not be considered a direct cause of TMD but may act as cofactors in the development of this condition. Future longitudinal studies are recommended to gain a deeper understanding of this association.

Keywords: malocclusion; temporomandibular disorders; dental occlusion; temporomandibular joint dysfunction syndrome

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