



PREVALENCE OF MOLAR AND CANINE RELATIONSHIPS IN A PEDIATRIC DENTISTRY POPULATION

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INTRODUCTION

Malocclusion is regarded as a public health concern due to its high prevalence, the frequent need for treatment, and its impact on the quality of life of affected individuals. Given its widespread global occurrence and early onset during childhood, it is essential for paediatricians and dental practitioners to adopt preventive clinical strategies. Early diagnosis and appropriate management of malocclusion development—such as the prevention of deleterious oral habits—can yield both short- and long-term benefits, promoting occlusal harmony, functional efficiency, and aesthetic outcomes.

RESULTS

2005-2019 2023

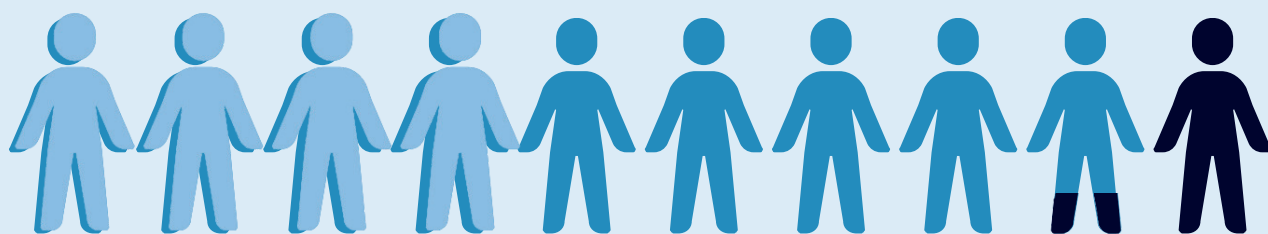
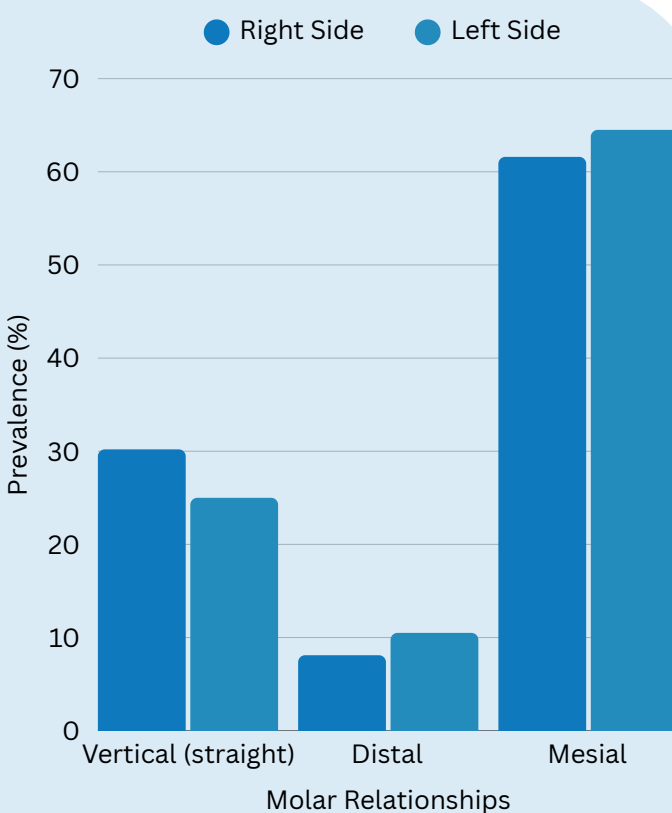


Figure 1: The prevalence of malocclusion in the *Lisboa e Vale do Tejo* Health District between 2005-2019 increased from 44.0% to 98.8%.

- The highest prevalence was observed for the mesial step, on both the right and left sides.
- No statistically significant differences were found between sexes or age groups.
- Among 4-year-old children, the mesial step was the most prevalent bilaterally.



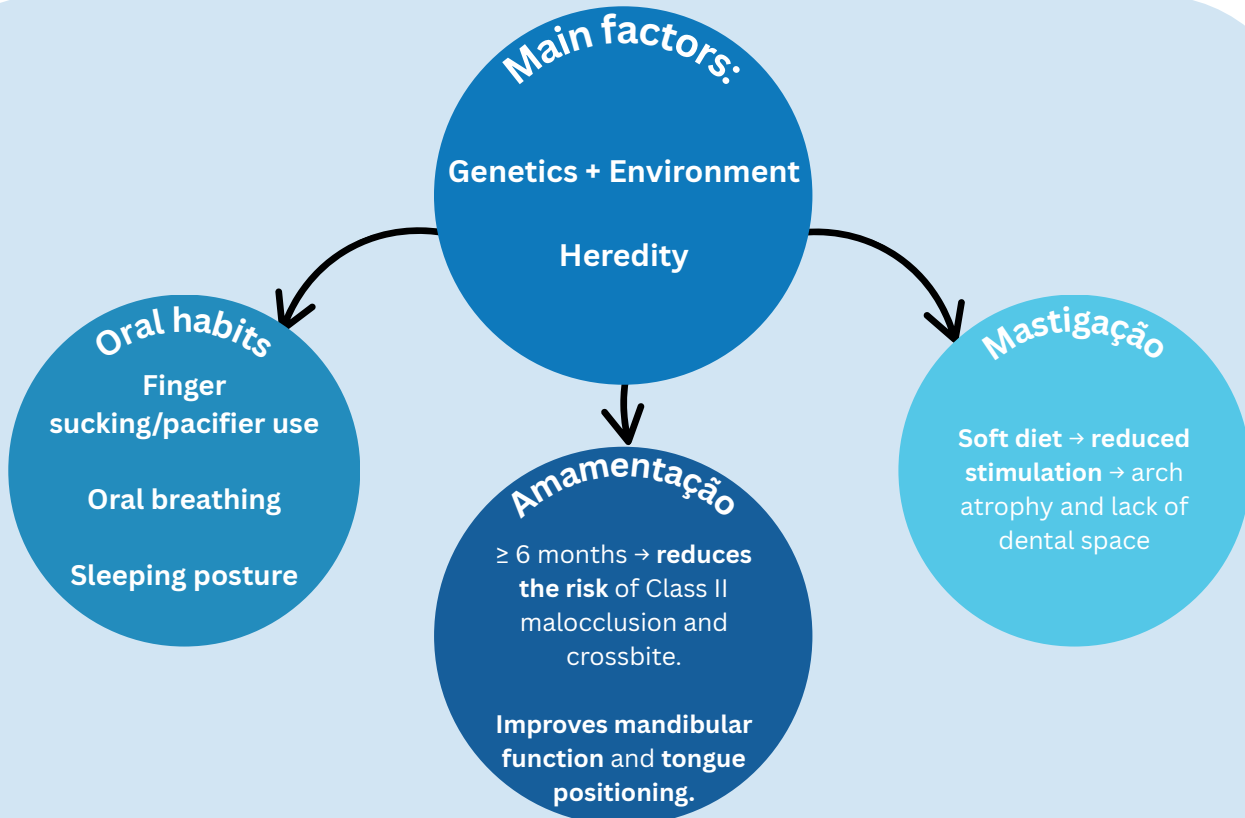
Graph 3. Prevalence of Molar Relationships

OBJECTIVES

- To assess the prevalence of molar and canine relationships in a pediatric population;
- To identify possible associations with age, sex, and deleterious oral habits.

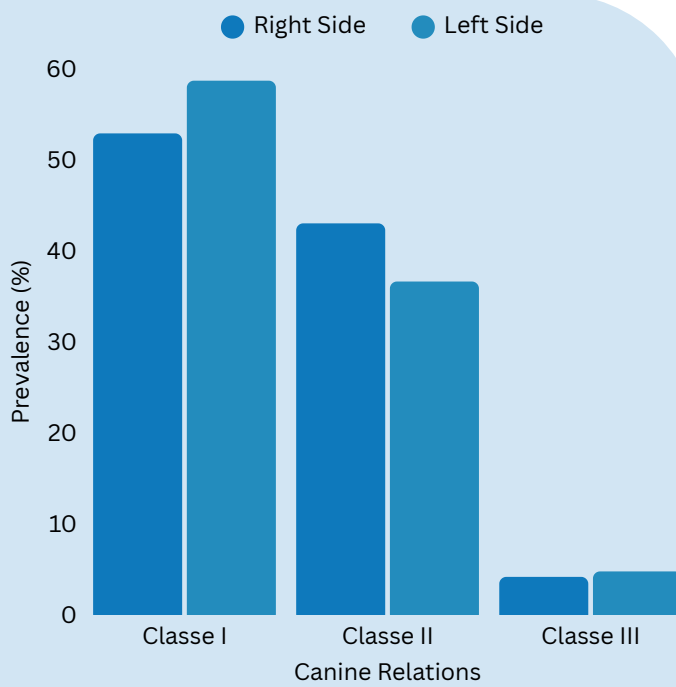
METHODOLOGY

- Study Type: Observational, descriptive, cross-sectional;
- Sample: 172 children aged 3 to 5 years, enrolled in the 1st Cycle of Basic Education in the parish of Fernão Ferro, Portugal. The study was approved by the Ethics Committee of Egas Moniz School of Health and Science.



Graph 2. Etiology of Malocclusions

- Class I was the most frequently observed relationship bilaterally.
- No significant differences were found between sexes or age groups.
- These findings are consistent with the majority of previous studies.



Graph 4. Prevalence of Canine Relationships

DISCUSSION

These findings reinforce existing literature, with the mesial step emerging as the most prevalent molar relationship and Class I as the most common canine relationship. The lack of significant sex-based differences suggests that behavioural factors may play a more prominent role than genetic ones in the development of these occlusal patterns.

CONCLUSION

In the population studied, it was concluded that, over the years, there has been a sharp increase in malocclusion, suggesting that it is a public health problem worthy of being addressed, with the development of public health policies that focus on prevention, diagnosis and early intervention being an urgent measure.