OCCLUSION IN THE DECIDUOS DENTITION

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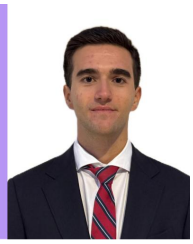


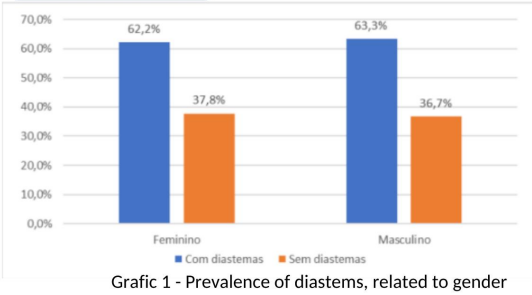
Introduction

The prevalence of malocclusion is an important issue and needs to be detected early in childhood to ensure a healthy development of the occlusion and its stability in adulthood (1). This cross-sectional study aimed to assess the prevalence of diastems, primate spaces, overbite and overjet by relating variables to gender and age.

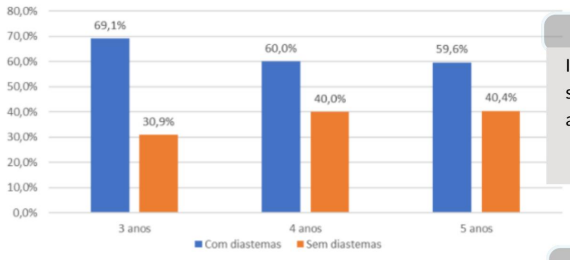
Materials and Methods

A clinical examination was carried out on a sample consisting of 172 children of both genders, aged between 3 and 5 years old, at the "A Casinha Mágica"; "O Nosso Jardim"; "O Piparote" and "Seixal International School" kindergartens. Data colection was carried out based on a clinical examination using observation kits and disposable gloves, in a class environment, in each of the kindergartens.

Resultados



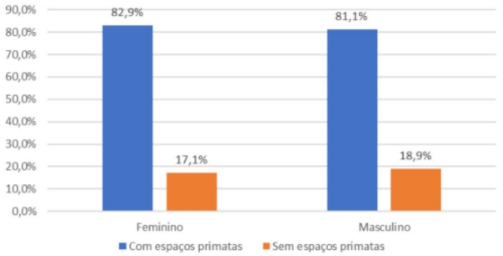
Grafic 1 - Prevalence of diastems, related to gender



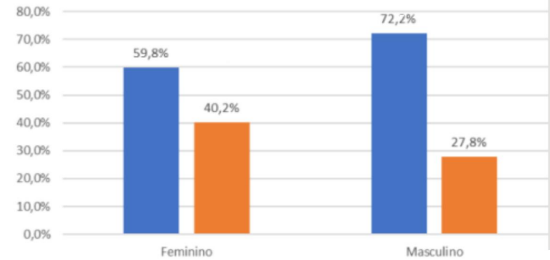
Grafic 2 - Prevalence of diastems, related to age

Diastems

In grafic 1 and 2 there were no statistical significance between the variables gender and age for the prevalence of diastems.



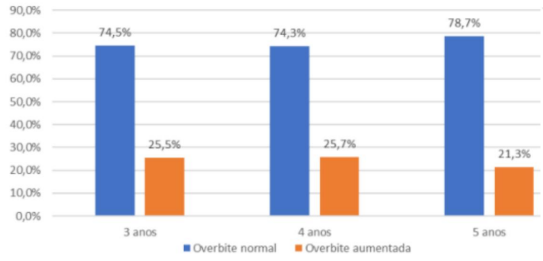
Grafic 3 - Prevalence of superior arch primate spaces, related to gender



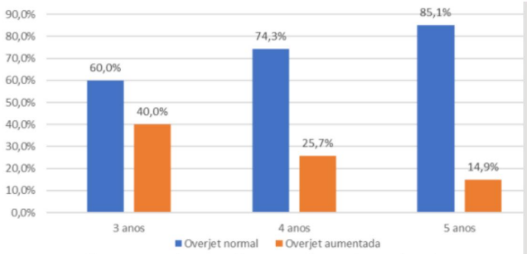
Grafic 4 - Prevalence of inferior arch primate spaces, related to gender

Primate spaces

In grafic 3 there was no statistical significance between the variable gender for the prevalence of superior arch primate spaces. In grafic 4 there was also no statistical significance between the variable gender for the prevalence of inferior arch primate spaces, altought the prevalence of primate spaces on the inferior arch was lower than the superior arch.



Grafic 5 - Prevalence of increased overbite, related to age



Grafic 6 - Prevalence of increased overjet, related to age

Overbite and Overjet

In grafic 5 there was no statistical significance between the variable age for the prevalence of overbite. Nevertheless in grafic 6 there was statistical significance between the prevalence of overjet related to age (p=0,017). Acounting the distribuition of diferent ages, 40,0% (n=22) of the children with increased overjet were 3 years old. The 4 years old children presented the second highest prevalence with 25,7% (n=18), followed by 5 years old with 14,9% (n=7).

Discussion

The study sample showed a high prevalence of malocclusion (98.8%), higher than other similar studies. Among the children observed, 24.4% had an increased overbite and 27.3% had an increased overjet. This last variable had a statistically significant negative correlation with age. The prevalence of diastems was 62.8% and had no statistically significant relationship between gender and age. The prevalence of primate spaces was 62.8% and there was no statistically significant relationship between gender and age. The prevalence of overjet in the superior arch was 82%, with no significant correlation between sex and age, and in the inferior arch it was 66.3%. This existing correlation between overjet and age, that overjet decreases with age, has also been shown by other previous studies such as Ventura I.(2005), the maxillary bone growth, the correlation of the nasopharynx and the reduction of deleterious habits are probably the reason for this decrease (2).

Conclusion

In conclusion, there is a high prevalence of diastems in the deciduos dentition, but there are also many cases where they are absent. Relative to primate spaces we can see that they are more absent in the lower arch than the superior arch. In the case of overbite there is no correlation with age and in most cases we could spot a normal overbite, nevertheless in the case of overjet we can see a significant negative correlation with age, showing the higher prevalence of overjet at the younger age (3 years old). The elaboration of epidemiologic studies like this is crucial to better understand the portuguese reality about occlusion parameters in early childhood.

Bibliografia

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