



ASSOCIATION BETWEEN ASTHMA AND ORAL DISEASES

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Introduction: Asthma is a chronic respiratory disease common in childhood. Children with this condition are prone to compromised oral health. The objective was to determine the oral clinical manifestations of asthmatic children aged 5-12 years from a Yucatan population.

Methodology: This is an observational, epidemiological, and analytical study. A total of 163 patients between the ages of 5 and 12 were included from October 2018 to February 2019. Each child underwent an intraoral review evaluating caries, gingivitis, erosion, and bruxism. The association between asthma and each variable was assessed with the Chi² statistical test or with F-Fisher (significant value of p ≤ 0.05).

Results: 163 children were examined and divided into two groups: asthmatics (n=43) and controls (n=120). A significant association was found between asthma and caries (Chi² =6.413, p =0.011, OR =3.828) and between asthma and erosion (F-Fisher p =0.017, OR =11.984). No association was found between asthma and gingivitis (Chi² =3.235, p =0.072, OR =11.984) or between asthma and bruxism (F-Fisher p =0.608, OR =1.893).

Table 1. Frequency of the variables caries, gingivitis, erosión and bruxism.

Variable	Frequency n (%)	
	Case	Controls
Caries	39 (90,7)	86 (71,7)
Gingivitis	14 (32,6)	23 (19,2)
Erosión	4 (9,3)	1 (0,8)
Bruxism	2 (4,7)	3 (2,5)

Table 2. Association between asthma and the variables studied.

Variable	Chi ²	p	OR	OR [CI 95%]
Caries	6,413	0,011*	3,828	1,239, 15,868
Gingivitis	3,235	0,072*	2,026	0,849, 4,740
Erosión	-----	0,017**	11,984	1,142, 603,795
Bruxismo	-----	0,608**	1,893	0,153, 17,14

*Chi². ** F-Fisher
OR = Odds Ratio. CI = confidence interval

Discussion: Sexto et al., in their case-control study, found that asthmatic children had a CPO-D index of 3.28 and a 4.9 times greater risk of suffering from dental caries than the control group. Ersin et al. classified children into 2 groups according to their age: 6 to 10 years and 11 to 19 years. In their study, they observed that only asthmatic patients in the 6 to 10-year-old group had a high prevalence of dental caries, which is related to the results we obtained in this research. In the current research, the association between asthma and erosion was significant (p= 0.017), coinciding with the results of Manish Jain et al., who report a significantly higher level of erosion in asthmatics.

Conclusions: From the selected population in this study, children with asthma have a higher risk of presenting caries and dental erosion.

Bibliography:

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