

Evaluation of prevalence of oral lesions among children of upto 12 years of age

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Abstract

Background: The present study was conducted for assessing the prevalence of oral lesions among children of upto 12 years of age.

Materials & methods: 100 children upto the age group of 12 years were analyzed. Complete demographic details of all the children was obtained. Consent was obtained from the parents/guardians of all the subjects for carrying out their oral examination. A master chart was prepared in excel sheet and prevalence and spectrum of oral lesions was recorded. All the results were recorded and analyzed by SPSS software.

Results: Oral lesions were found to be present in 22 children. Hence; the overall prevalence of oral lesions was 22 percent. 10 children were boys while the remaining 12 children were girls. Among these children with presence of oral lesions, the most frequent lesions recorded were oral candidiasis and geographic tongue found to be present in 6 children and 8 children respectively. Traumatic lesions were seen in 4 children, while aphthous lesions were seen in 3 children. Herpes simplex virus infection was found to be present in 1 subject.

Conclusion: Oral lesions are affecting a significant proportion of children population.

Key words: Oral Lesions, Children

INTRODUCTION

Oral health is the entire health of the teeth, mucosal areas, periodontal tissues and tongue. The concept of oral and dental health is mostly being perceived to be limited to carious teeth and periodontal diseases by both clinicians and academics. Based on this view, diseases of oral mucosal areas are generally ignored by dental practitioners. Current researches mainly focused on a single lesion or include lesions in

a single anatomical area. Moreover there are even fewer studies in pediatric population about oral mucosal lesions.¹⁻³

Dental caries is the most prevalent chronic disease affecting humans irrespective of age, sex, race and socioeconomic status. As around 90% of school children and most of the adults have been affected by dental caries, hence it has been considered as the most important global oral health burden. Epidemiological

surveys are important for monitoring trends in dental caries and for assessing the dental needs. According to the World Health Organization (WHO 1997), detection of dental caries in surveys has been performed at cavitation level because examiners frequently cannot reliably assess the non-cavitated lesions. However, the inclusion of non-cavitated caries lesions is necessary since these can be arrested through certain preventive measures and lowering the cost of restorative treatment.^{3- 5}Hence; the present study was conducted for assessing the prevalence of oral lesions among children of upto 10 years of age.

MATERIALS & METHODS

The present study was conducted for assessing the prevalence of oral lesions among children of upto 12 years of age. A total of 200 children upto the age group of 12 years were analyzed. Complete demographic details of all the

children was obtained. Consent was obtained from the parents/guardians of all the subjects for carrying out their oral examination. A master chart was prepared in excel sheet and prevalence and spectrum of oral lesions was recorded. All the results were recorded and analyzed by SPSS software.

RESULTS

100 subjects were analyzed. Oral lesions were found to be present in 22 children. Hence; the overall prevalence of oral lesions was 22 percent. 10 children were boys while the remaining 12 children were girls. Among these children with presence of oral lesions, the most frequent lesions recorded were oral candidiasis and geographic tongue found to be present in 6 children and 8 children respectively. Traumatic lesions were seen in 4 children, while aphthous lesions were seen in 3 children. Herpes simplex virus infection was found to be present in 1 subject.

Table 1: Prevalence of oral lesions

Oral lesions	Number	Percentage
Present	22	22
Absent	78	78
Total	100	100

Table 2: Spectrum of oral lesions

Oral lesions	Number
Oral candidiasis	6
Geographic tongue	8
Traumatic lesions	4
Aphthous lesions	3
Herpes simplex virus infection	1
Total	22

DISCUSSION

Despite World Health Organization's (WHO) reports supporting epidemiological studies, there is little number of researches about oral mucosal lesions and these have many problems about ensuring standardization. There are some differences in diagnostic criteria and methodology of these studies. Moreover, the differences in geographic region where the study was conducted and racial differences may also affect the results. Oral lesions in children encompass a wide range of etiologies, including idiopathic entities as well as those related to an underlying systemic illness.^{6- 8}The investigation of OMLs prevalence in specific population groups is

mandatory in order to understand its extension and characteristics, but it is also important for the improvement of oral health promotion and prevention programs for specific age groups, as recommended by the World Health Organization.^{6- 8}Hence; the present study was conducted for assessing the prevalence of oral lesions among children of upto 10 years of age.

100 subjects were analyzed. Oral lesions were found to be present in 22 children. Hence; the overall prevalence of oral lesions was 22 percent. 10 children were boys while the remaining 12 children were girls. Among these children with presence of oral lesions, the most frequent lesions recorded were oral candidiasis

and geographic tongue found to be present in 6 children and 8 children respectively. Arangannal P et al assessed the prevalence of dental caries in school children aged between 6-14 years using the International Caries Detection and Assessment System (ICDAS II). The study population consisted of 2796 school children living in Pallikaranai, Chennai, India and studying in government recognized schools. Each student was examined by a single examiner using ICDAS system under natural light during normal school hours. The prevalence of dental caries was 68.8% in the total surveyed population. The gender-wise prevalence of dental caries shows, females to have slightly higher prevalence than male. The prevalence of dental caries at the age group of 6 years was 57%, seven year 67%, eight year 63%, nine year 74%, 10 year 76%, 11 year 74%, 12 year 69%, 13 year 71%, and 14 year 69%. The distribution of CARS (Caries associated with Sealants and Restorations) in the surveyed population was only 1.4% The distribution of non-cavitated/early enamel lesions was higher in the studied population and indicated a requirement of a sustained dental health preventive program targeting specific segments of the population.⁹ Traumatic lesions were seen in 4 children, while aphthous lesions were seen in 3 children. Herpes simplex virus infection was found to be present in 1 subject. Vitor G DE Souza et al described the distributions of oral lesions in children and teenagers diagnosed in a Pathology service of Amazon for over 15 years. From a total of 2437 histopathological oral reports, 225 of them were from children. Of these, 125 (55.6%) were from male patients and 100 (44.4%) from female patients with a median age of 13 years. Of the 11 categories of oral pathologies, the one of the highest numbers was salivary gland disease (N.=50, 22.2%) with the subtype mucocele (N.=41, 18.22%) as the most prevalent followed by Miscellaneous pathology (N.=27, 12%) with the predominance of the subtype granulation tissue (N.=11, 4.89%) and finally Odontogenic tumors (N.=26, 11.6%) in third place, with odontoma (N.=16, 7.11%) as the most prevalent subtype. Mucocele was the most prevalent lesion found, showing that a traumatic etiology is likely to be the most common situation in children and teenagers, while neoplastic lesions are generally rare.¹⁰

CONCLUSION

Oral lesions are affecting a significant proportion of children population.

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