Journal of Advanced Medical and Dental Sciences Research
@Society of Scientific Research and Studies
Journal home page: www.jamdsr.com doi: 10.21276/jamdsr ICV 2018= 82.06
(e) ISSN Online: 2321-9599; (p) ISSN Print: 2348-6805

Original Research

Retrospective Analysis of Patients with Different Oral Lesions visited in Department

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ABSTRACT
Background: Epidemiologic studies provide important information for the understanding of the prevalence, incidence, and severity of oral disease in a specific population. It is important to understand the distribution, etiology, risk factors, and pathogenesis of oral mucosa lesions. Hence; the present study was undertaken for assessing the pattern of occurrence of different oral lesions visiting in department. **Materials & methods:** Data of a total of 525 patients was analyzed in department of oral pathology and microbiology retrospectively for last 5 years. Data of all the patients was obtained that reported to the department for any kind of oral and dental problem. Also patients who reported for head and neck pathology were also included. Complete demographic and clinical details of all the patients were obtained. Frequency of occurrence of oral lesions was recorded. Also separate recording the spectrum of different oral lesions was also done. Correlation of occurrence of these lesions with age group and gender was done. **Results:** Oral lesions on the soft tissue were present in 56 patients. Therefore, the overall prevalence of oral lesions was 10.67 percent. Among these 56 patients, there were 26 males and 30 females. Majority of these 56 patients belonged to the age group of 30 to 40 years. These soft lesions encountered in the present study were oral lichen planus (5 patients), oral leukoplakia (23 patients), Erythroplakia (6 patients), Oral submucous fibrosis (2 patients), oral candidiasis (8 patients), aphthous ulcers (2 patients), oral squamous cell carcinoma (2 patients), squamous papilloma (5 patients), gingival enlargement (2 patient) and pemphigus (1 patient). **Conclusion:** Oral lesions constitute a major proportion of patients reporting to the clinics for treatment. Careful screening of these lesions should be done thoroughly because of premalignant potential of some lesions.
Key words: Oral mucosal lesions, Prevalence, leukoplakia.

Received: 17 February, 2019 Revised: 18 March 2019 Accepted: 20 March 2019

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This article may be cited as: Gupta S, Pathak P, Rathore A. Retrospective Analysis of Patients with Different Oral Lesions visited in Department. J Adv Med Dent Scie Res 2019;7(4): 149-152.

INTRODUCTION

India is the second largest consumer of tobacco in the world, China being in the first position. The prevalence of tobacco use among adults where 15 years and above is 35%. The prevalence of tobacco use among males is 48% and that among females is 20%. Nearly, two in five (38%) adults in rural areas and one in four (25%) adults in urban areas use tobacco in some form. Tobacco use and alcohol drinking are clear risk factors for oral cancer in India and elsewhere. Smoking and drinking are positively associated with oral lesions such as oral submucous fibrosis (OSMF), leukoplakia, and oral lichen planus, which have the potential for malignant transformation. The prevalence of OSMF in India varies between 0.03% and 3.2% according to various studies.[1-4]

Epidemiologic studies provide important information for the understanding of the prevalence, incidence, and severity of oral disease in a specific population. It is important to understand the distribution, etiology, risk factors, and pathogenesis of oral mucosa lesions. This presents an opportunity for a timely primary prevention, early diagnosis, and prompt treatment.[5, 6]

Hence; the present study was undertaken for assessing the pattern of occurrence of different oral lesions visiting in department.

MATERIALS & METHODS

The present study was conducted with the aim of assessing the patients with different oral lesions. Patient records were collected for the last 5 years from the department of Oral Pathology and Microbiology. Ethical

approval was obtained from institutional ethical committee and written consent was obtained after explaining in detail the entire research protocol. Data of a total of 525 patients was analyzed. Data of all the patients was obtained that reported to the department for any kind of oral and dental problem. Complete demographic and clinical details of all the patients were obtained. Frequency of occurrence of oral lesions was recorded. Also separate recording the spectrum of different oral lesions was also done. Correlation of occurrence of these lesions with age group and gender was done. All the results were recorded in Microsoft excel sheet and were analyzed by SPSS software. Chi- square test was used for assessment of level of significance.

RESULTS

In the present study, data of a total of 525 patients was analyzed. Among these 525 patients, oral lesions on the soft tissue were present in 56 patients. Therefore, the overall prevalence of oral lesions was 10.67 percent. Among these 56 patients, there were 26 males and 30 females. Majority of these 56 patients belonged to the age group of 30 to 40 years. These soft lesions encountered in the present study were oral lichen planus (5 patients), oral leukoplakia (23 patients), Erythroplakia (6 patients), Oral submucous fibrosis (2 patients), oral candidiasis (8 patients), aphthous ulcers (2 patients), oral squamous cell carcinoma (2 patients), squamous papilloma (5 patients), gingival enlargement (2 patient) and pemphigus (1 patient).

In the present study, non-significant results were obtained while assessing the age-wise distribution of patients with different oral lesions. Also, non-significant results were obtained while assessing the gender-wise distribution of patients with oral lesions.

Table 1: Prevalence of oral lesions

Parameter	Number	Percentage
Oral lesions	56	10.67
Total patients	525	100

Table 2: Distribution of patients with oral lesions

Oral lesions	Number	Percentage
Oral lichen planus	5	8.93
Oral leukoplakia	23	41.07
Oral Erythroplakia	6	10.71
Oral submucous fibrosis	2	3.57
Oral candidiasis	8	14.29
Aphthous ulcers	2	3.57
Oral squamous cell carcinoma	2	3.57
Squamous papilloma	5	8.93
Gingival enlargement	2	3.57
Pemphigus	1	1.79
Total	56	

Table 3: Age-wise distribution of patients with oral lesions

Oral lesions	Less than or equal to 30 years	31 to 40 years	More than 40 years	p- value
Oral lichen planus	2	2	1	0.15
Oral leukoplakia	6	12	5	
Oral Erythroplakia	3	2	1	
Oral submucous fibrosis	1	0	1	
Oral candidiasis	3	3	2	
Aphthous ulcers	1	1	0	
Oral squamous cell carcinoma	0	1	1	
Squamous papilloma	2	2	1	
Gingival enlargement	1	1	0	
Pemphigus	0	1	0	
Total	19	25	12	

Table 4: Gender- wise distribution of patients with oral lesions

Oral lesions	Males	Females	p- value
Oral lichen planus	3	2	0.72
Oral leukoplakia	11	12	
Oral Erythroplakia	2	4	
Oral submucous fibrosis	1	1	
Oral candidiasis	2	6	
Aphthous ulcers	1	1	
Oral squamous cell carcinoma	1	1	
Squamous papilloma	3	2	
Gingival enlargement	1	1	
Pemphigus	1	0	
Total	30	26	

DISCUSSION

A broad range of OML has received interest for epidemiologic studies worldwide, but few studies have documented the entire range of possible lesions. Although in 1980, the World Health Organization (WHO)'s "Guide to epidemiology and diagnosis of oral mucosal disease and conditions" provided a systemic approach of data collection, the epidemiologic literature on oral mucosal diseases is somewhat scanty in this country. Cancer has always been a challenge to medical science with the continuing global increase of cases. Cases of oral cancer have increased considerably with almost 263,900 new cases and 128,000 deaths reported worldwide in 2006.[6- 9]

In the present study, data of a total of 525 patients was analyzed. Among these 525 patients, oral lesions on the soft tissue were present in 56 patients. Therefore, the overall prevalence of oral lesions was 10.67 percent. Among these 56 patients, there were 26 males and 30 females. Majority of these 56 patients belonged to the age group of 30 to 40 years. These soft lesions encountered in the present study were oral lichen planus (5 patients), oral leukoplakia (23 patients), Erythroplakia (6 patients), Oral submucous fibrosis (2 patients), oral candidiasis (8 patients), aphthous ulcers (2 patients), oral squamous cell carcinoma (2 patients), squamous papilloma (5 patients), gingival enlargement (2 patient) and pemphigus (1 patient). Krishna Priya M et al measured the association between oral mucosal lesions (OMLs) and habit of tobacco and alcohol in the population of Guntur city, Andhra Pradesh, South India. A cross-sectional study was conducted on 300 participants in Guntur city with the habit of tobacco and alcohol consumption in various forms who were selected by stratified cluster random sampling technique. Overall oral soft-tissue lesions were found in 42.4% of the study participants including nicotinic stomatitis, tobacco pouch keratosis, smokersmelanosis, mild keratosis of the palate, and chewer's mucosa. In this study, nicotinic stomatitis was found to be the most common soft-tissue lesion among men, while leukoplakia was found to be the most common premalignant lesion with the prevalence being 5.7%. While oral submucous fibrosis was found to be the most common premalignant condition among women. It was found that 13.2% of illiterates (53) were having leukoplakia. In the present study, the lower labial mucosa and buccal mucosa were found to be the most common sites of occurrence of leukoplakia and oral submucous fibrosis. This study gave information on the association of OML in smokers, chewers, alcoholics, and those with mixed habits. This study highlighted six habit-related OML which included potentially malignant disorders such as leukoplakia and oral submucous fibrosis.[10]

In the present study, non-significant results were obtained while assessing the age-wise distribution of patients with different oral lesions. Also, non-significant results were obtained while assessing the gender-wise distribution of patients with oral lesions. El Toum S et al determined the prevalence and distribution of oral mucosal lesions of patients attending the School of Dentistry. A descriptive study was carried out by retrospectively examining a total of 231 medical and clinical examination record files of patients, attending the School of Dentistry Lebanese University for multidisciplinary dental treatments. 178 medical records were retained. Each medical and clinical examination record was done by an undergraduate student and then evaluated by a doctor. The record file included a civil status, chief complaint, medical history, and extraoral and intraoral clinical examination during the period between October 2014 and May 2015. Exclusion criteria were lack of written information in their medical and clinical examination record and being non evaluated by a doctor. Data regarding age, gender, socioeconomic status, chief complaint, systemic diseases, and drugs intake were collected by using a questionnaire while the type of extraoral and oral mucosal lesions by clinical examination. The sample consisted of 102 (57.3%) females and 76 (42.7%) males. The age ranged from 10 to 92 years with a mean age of 40.1 years. Among these subjects, 110 (61.8%) presented with one or more lesions. All patients were Lebanese. The most common lesion diagnosed was coated/hairy tongue affecting 17.4% of the subjects, followed by melanotic macule (11.2%), gingivitis (9.6), linea alba (6.2%), tongue depapillation (5.1), leukoplakia (5.1), traumatic fibroma (4.5), frictional keratosis (3.9%), fissured tongue (3.9%), hemangiomas (3.9%), Fordyce granules (3.9%), dry mucosa (3.4), angular cheilitis (2.2), gingival hyperplasia (2.2), and crenulated tongue (1.7%). Overall, the prevalence of oral mucosal lesions did not significantly differ between sex and age groups. The high prevalence of oral mucosal

lesions necessitates adequate awareness and management of these lesions in the general population.[11]

CONCLUSION

From the above results, the authors conclude that oral precancerous lesions constitute a major proportion of patients reporting to the department. Careful screening of these lesions should be done thoroughly because of premalignant potential of some lesions.

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