



HISTOPATHOLOGICAL SPECTRUM OF ORAL LESIONS IN A TERTIARY CARE HOSPITAL

Pathology

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ABSTRACT

Oral cavity is the site of several tumour and tumour like lesions . Aim of this study is to study the spectrum of oral cavity lesion. It is a hospital based retrospective study conducted for a period of 1 year from April 2016 to March 2017 in the department of pathology , Assam medical college , Dibrugarh . A total of 184 specimens were studied ,129 cases were male and 55 were female . 67 cases were benign , 20 premalignant and 90 malignant . Most common benign lesion was pyogenic granuloma , commonest premalignant lesion was high grade dysplasia and well differentiated squamous cell carcinoma was the commonest malignant lesion . The commonest site for malignant lesion was buccal mucosa followed by anterior part of tongue. It is advisable to have a histopathological examination to confirm the nature of various lesions.

KEYWORDS

Oral Cavity , Benign , Malignant

INTRODUCTION

Oral cavity is the site of several tumour and tumour like lesions . Lesions are usually asymptomatic hence are diagnosed late . Oral cancers account for over 30% of all cancers in India .¹ Incidence rates per 100,000 population in India were found to be 12.8 in men and 7.5 in women.² These tumors are one of the most challenging tumors regarding their good prognosis in early diagnosis & very difficult control in advanced stages . As oral cavity is a portal of entry for both gastrointestinal and respiratory tracts , so it is exposed to a number of injurious substances and carcinogenic agents such as infections, physical and thermal influences, deranged immune system, trauma and systemic diseases. The persistent effect of these factors may bring dysplastic changes in oral mucosa. Different sites in oral cavity show predilection for different types of lesions. The present study was conducted to study the spectrum of oral cavity lesions.

MATERIALS AND METHODS

It is a hospital based retrospective study conducted for a period of 1 year from April 2016 to March 2017 in the department of pathology , Assam medical college , Dibrugarh . A total of 184 specimens were processed, sectioned and stained with Hematoxylin and eosin stain and reviewed by pathologists. Relevant data like age, sex and site were obtained from the requisition forms provided with the specimens.

RESULTS In the present study , out of 184 cases 129 cases were male and 55 were female . The age group was 8 to 90 years. 67 cases were benign , 20 premalignant and 90 cases were malignant . Highest number of premalignant cases were noted in 41-50 age group and malignant cases were common in 51-60 age group . Most common benign lesion was pyogenic granuloma (29 cases) , most common premalignant lesion was high grade dysplasia (12 cases) and well differentiated squamous cell carcinoma (46 cases) was the most common malignant lesion . The most common site for malignant lesion was buccal mucosa (46 cases) followed by anterior part of tongue (10 cases)

Table 1: Distribution Of Cases According To Age

Serial no.	Age group in years	No. of cases	Percentage(%)
1	1-10	4	2.17
2	11-20	8	4.34
3	21-30	21	11.41
4	31-40	25	13.58
5	41-50	42	22.82
6	51-60	31	16.84
7	61-70	27	14.67
8	71-80	17	9.23
9	81-90	9	4.89
	TOTAL	184	100

TABLE 2 : DISTRIBUTION OF CASES ACCORDING TO SITE

SITE	NO. OF CASES	PERCENTAGE
BUCCAL MUCOSA	70	38.04
ANGLE OF MOUTH	1	0.54
UPPER LIP	6	3.26
UNDER SURFACE OF TONGUE	1	0.54
ANTERIOR PART OF TONGUE	23	12.5
LATERAL TONGUE	20	10.87
HARD PALATE	15	8.15
GINGIVOBUCAL SULCUS	17	9.24
CHEEK	1	0.54
FLOOR OF MOUTH	7	3.80
TOOTH	3	1.63
LOWER LIP	17	9.24
RETROMOLAR TRIGONE	3	1.63
TOTAL	184	100

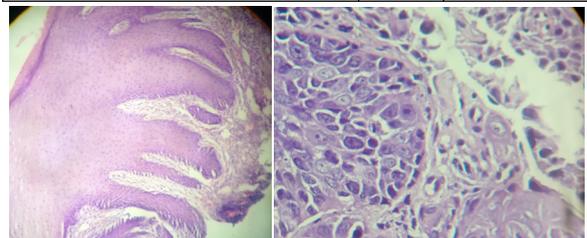


Fig1: Squamous Papilloma

Fig 2 : Squamous Cell Carcinoma

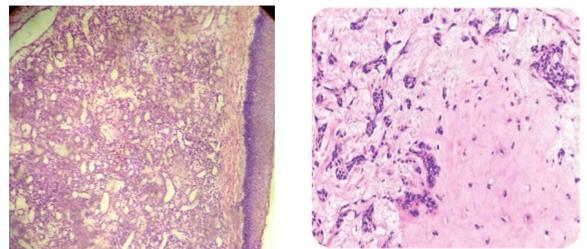


Fig 3 :Capillary Hemangioma

Fig 4 : Pleomorphic adenoma

Table 3: Histopathological Spectrum Of Oral Lesions

LESION	NO. OF CASES	PERCENTAGE (%)
NON-NEOPLASTIC		
CHRONIC INFLAMMATORY LESION	12	6.5
MUCOCELE	1	0.54
EPULIS	3	1.63

SIALADENITIS	1	0.54
EPIDERMAL CYST	6	3.26
DENTIGEROUS CYST	2	1.08
BENIGN		
PYOGENIC GRANULOMA	29	15.76
CAVERNOUS HEMANGIOMA	2	1.08
FIBROEPITHELIAL POLYP	1	0.54
SQUAMOUS PAPILLOMA	4	2.17
LIPOMA	1	0.54
INVERTED PAPILLOMA	2	1.08
FIBROMA	1	0.54
PLEUMORPHIC ADENOMA	1	0.54
GRANULAR CELL TUMOUR	1	0.54

PRE-MALIGNANT		
HIGH GRADE DYSPLASIA	12	6.52
LOW GRADE DYSPLASIA	7	3.80
LEUKOPLAKIA	1	0.54
MALIGNANT		
SQUAMOUS CELL CARCINOMA	91	49.45
UNDIFFERENTIATED CARCINOMA	2	1.08
VERRUCOUS CARCINOMA	4	2.17
TOTAL	184	100

DISCUSSION:

In our study, a total of 184 cases were analyzed, the age ranges were 8-90 years which is similar to Kosam S et al.³. The frequency of oral lesions was more in male (70.11%) than female (29.89%) which is similar to Kosam S et al.³ 13.58% cases were non-neoplastic, 22.8% cases were benign, 10.86% cases were premalignant and 52.71% cases were malignant. This is similar to studies Ranjan et al.⁴ and Mehrotra et al.⁵

Highest number of premalignant cases were noted in 51-60 years age group while malignant cases were maximum in 41-50 years age group. The commonest site involved was buccal mucosa (38.04%) followed by anterior part of tongue (12.5%). Similar findings were seen in a study done by Modi *et al.*⁶ where reported site of involvement were buccal mucosa (26.8%), tongue (26.1%), gingival (2%), lip (6.7%), and hard palate (12.6%). Even Nikunj V Mehta et al⁷ and Mehrotra et al⁵ reported similar findings.

Chronic inflammation was the commonest non-neoplastic lesion followed by epidermal cyst in our study. 33% of inflammatory lesions were seen in a study done by Modi et al.⁶ and Pudasaini S et al.⁸ reported 19% inflammatory lesions.

Pyogenic granuloma was the commonest benign lesion which is in concordance with Modi et al.⁶ Premalignant lesions reported commonly were High grade dysplasia. Kaur, N et al.¹¹ in their study found leukoplakia as the commonest premalignant lesion.

In our study, Squamous cell carcinoma was the commonest malignant lesion followed by verrucous carcinoma which is similar to studies Nikunj V. Mehta et al⁷, Modi D et al.⁶. Maximum cases of squamous cell carcinoma were well differentiated. Most common involved age group was 51-60 years. This is similar to studies Ildstad et al⁹ and Weber et al¹⁰. Males were more affected than females.

CONCLUSION:

In our study, a variety of lesions were encountered with predominance of malignant lesions, SCC being the commonest. The origin and nature of the oral cavity lesions cannot be confirmed by clinical examination alone, hence, it is advisable to have a histopathological examination to confirm the nature of the lesion.

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