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TO SEE THE HISTO-PATHOLOGICAL PATTERN OF ORAL MUCOSAL LESIONS

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Abstract

Background & Method: This prospective observational study was carried out with total number of patients 60 in the Department of Otorhinolaryngology and head and neck surgery, Amaltas Institute of Medical Sciences, Dewas, M.P., w.e.f. from August 2018 to September 2020. Patient was thoroughly investigated for complete haemogram, blood sugar, blood urea, serum creatinine, bleeding & Clotting time, coagulation profile, chest x-ray for any secondary focus.

Result: Out of 35 cases of clinically premalignant lesions 30 cases were positive for malignant cells on histology. 5 were suspicious for malignant cells. Out of the 25 cases of clinically malignant lesions 25 cases were positive for malignant cells on histology and nil cases of suspicious for malignancy. In this present study, on histopathology premalignant lesions was found in 8.33% and malignancy was seen 91.66% cases. On histopathological examination, squamous cell carcinoma was the most common type among all cases (78.33%). In squamous cell carcinoma, keratinizing type was found in 33.33% and non- keratinizing type was found in 45%. Verrucous carcinoma was seen in 6.66% cases and verrucous hyperplasia was seen in 3.33% cases.

Conclusion: We Concluded in the study as diagnosed by histopathology were found premalignant in 8.33% and malignant 91.66% cases. The type of cancer was determined by histo-pathological examination after biopsy. Squamous cell carcinoma was the most common type among all cases (78.33%). In squamous cell carcinoma, keratinizing type were found in 33.33% and non-keratinizing type were found in 45%, followed by verrucous carcinoma was seen in 6.66% cases, and verrucous hyperplasia was seen in 3.33% cases.

Keywords: Histo-pathological, Oral Mucosal Lesions.

Introduction

Oral cavity is the most important organ of human body, as it serves as main gate of human body, all the feed what is essential for growth of the body and proper function of the body passes through the oral cavity, so oral cavity is very much prone to diseases like oral mucosal lesions (pre-cancerous and cancerous conditions)[1].

The knowledge of normal as well as surgical anatomy of the oral cavity along with its relations to the surroundings structures are vital for a ENT surgeon , and because of increasing awareness, patient with oral diseases usually presents himself/herself in ENT OPD.

Different oral diseases, may be in the form of a swelling [benign or malignant], or a mucosal or ulcerative lesions [pre-malignant or malignant], so the knowledge of all the pathological conditions of the oral cavity is mandatory for their successful treatment and management[2].

According to the study of Bharti Jha and et al in 2013[3], oral cancer is most commonly found in male and premalignant lesions are more common in the tongue whereas the floor of the mouth is more involved by malignant lesions. And there is no significant difference between histopathology and brush cytology in assessing clinically the premalignant lesions[4].

Material & Method

This prospective observational study was carried out with total number of patients 60 in the Department of Otorhinolaryngology and head and neck surgery, Amaltas Institute of Medical Sciences, Dewas, M.P., w.e.f. from August 2018 to September 2020.

The examination of the neck for enlarged lymph nodes in superficial and deep cervical chains along with submandibular, sub mental, pre & post auricular lymph nodes was done.

Patient was thoroughly investigated for complete haemogram, blood sugar, blood urea, serum creatinine, bleeding & Clotting time, coagulation profile, chest x-ray for any secondary focus.

Oral brush cytology was performed in all the 60 cases. Oral scraping was done with the help of brush, it is important to brush the edges of ulcer as well as the floor in order to obtain diagnostic material and smeared onto the glass slide and it is immediately fixed with isopropyl alcohol(95% absolute alcohol), and was sent for cytological examination.

Inclusion criteria:

1. Patient with difficulty in swallowing, pain during swallowing, burning sensation in oral cavity, difficulty in opening of mouth, swelling in neck and change in voice.

2. Patients having any type of mucosal lesions, white, black, erythematous, cracks, fissuring, patches and ulcers within the oral cavity.

Exclusion criteria:

1. Acute lesions of the oral cavity.
2. Lesions of oropharynx.
3. Patient's presenting with traumatic oral lesions.
4. Patients having past history of any such lesions or ulcers within the oral cavity.
5. Patient below 18 years of age.
6. Patient more than 65 years of age.

Results

Table 1: Distribution of cases according to clinico-histological correlation

Clinico Histology	Clinically Premalignant	Clinically Malignant
Suspicious For Malignant Cells	5	0
Positive For Malignant Cells	30	25
Total	35	25

Out of 35 cases of clinically premalignant lesions 30 cases were positive for malignant cells on histology. 5 were suspicious for malignant cells.
Out of the 25 cases of clinically malignant lesions 25 cases were positive for malignant cells on histology and nil cases of suspicious for malignancy.

Table 2: distribution of cases as diagnosed by histopathology

Diagnosis	No of Cases	Percentage
Premalignant	5	8.33%
Malignant	55	91.66%
Total	60	100%

In this present study, on histopathology premalignant lesions was found in 8.33% and malignancy was seen 91.66% cases.

Table 3: Type of cancer on the basis of histo-pathological examination

No.	Type	Cases	Percentage
1.	Non K. Sq C. CA	27	45%
2.	K. Sq. C. CA	20	33.33%
3.	Verrucous Ca.	4	6.66%
4.	Adenocarcinoma	1	1.66%
5.	Others		
	Verrucous Hyperplasia	2	3.33%
	Adenoid Cystic Tumor	1	1.66%

On histopathological examination, squamous cell carcinoma was the most common type among all cases (78.33%). In squamous cell carcinoma, keratinizing type was found in 33.33% and non- keratinizing type was found in 45%. Verrucous carcinoma was seen in 6.66% cases and verrucous hyperplasia was seen in 3.33% cases.

Discussion

Study was conducted on 60 patients with oral lesions. All the patients underwent clinical examination, complete investigations, including brush cytology and histopathological examination for doubtful precancerous and cancerous conditions and after reaching the diagnosis, patient was directed for the treatment, either radiotherapy chemotherapy, surgery, or a combination of these. Patients were asked for a scheduled follow-up for at regular intervals[5].

The patients in this series were of the age between 18 and 65 years. Most of the patients were elderly and the maximum numbers of patients were of age group 42-50 years (25%) followed by 34-42 years (23.34%), 58-65 years (20%), 26-34 years (18.34%), 50-58 years (10%) and the least cases belonged to 18-26 years (3.34%). No of cases decreased with the age. The incidences of oral cancers were very high among the age group of 35 to 50 years.

According to the study of [Llewellyn CD et al.][6] the reported data from western countries about was 6% of oral cancers occur in young people under the age of 45 years.

In the United States, studies performed during a 20 year period beginning in the 1960's revealed that there was a near four-fold increase of oral cancer in males ages 30-39 in the State of Connecticut. [Schantz SP and et al 2002][7] Similarly, studies by [Ribeiro et al 2008 and Iamaroon et al, 2004][8&9] also suggest high incidence of oral cancer in young adults.

Conclusion

We Concluded in the study as diagnosed by histopathology were found premalignant in 8.33% and malignant 91.66% cases. The type of cancer was determined by histo-pathological examination after biopsy. Squamous cell carcinoma was the most common type among all cases (78.33%). In squamous cell carcinoma, keratinizing type were found in 33.33% and non-keratinizing type were found in 45%, followed by verrucous carcinoma was seen in 6.66% cases, and verrucous hyperplasia was seen in 3.33% cases.

References

1. Moore S R, Jhonsons NW, Pierce AM et al. the epidemiology of mouth cancer, a review of global incidences. Oral diseases 2000;6(2):65-74.
2. Parkin, D. M., Laara, E and Muir, C. S. 1988; Estimates of the worldwide frequency of sixteen major cancers in 1988. International journal of cancer.41,184-197.
3. Bharti jha and et. Al. scrape cytology vs. punch biopsy in diagnosing oral lesions 2003.
4. Eversole LR. Laser artefacts and diagnostic biopsy. Oral Surg Oral Med Oral Pathol 1997; 83:639-641.
5. K Park, Estimates of the worldwide frequency of sixteen major cancers in 1988. International journal of cancer. 41,184-197
6. Llewellyn CD, Johnson NW, Warnakulasuriya KAAS: Risk factors for squamous cell carcinoma of the oral

cavity in young people - a comprehensive literature review. Oral Oncol 2001 , 37:401-18.

7. Schantz SP, Yu GP. Head and neck cancer incidence trends in young 3. Americans, 1973-1997, with special analysis for tongue cancer. Arch Otolaryngol Head Neck Surg 2002;128:268-74.
8. Ribeiro AC, Silva AR, Simonato LE, Salzedas LM, Sundefeld 7. ML, Soubhia AM. Clinical and histopathological analysis of oral squamous cell carcinoma in young people. Br J Oral Maxillofac Surg, 2008 Vol. 47 Issue 2 p95–98.
9. Iamaroon A, Pattanaporn K, Pongsiriwet S, Wanachantararak S, 8. Prapayasatok S, Jittidecharaks S, et al. Analysis of 587 cases of oral squamous cell carcinoma in northern Thailand with a focus on young people. Int J Oral Maxillofac Surg 2004;33:84–8.