

TONGUE LESIONS - A CLINICAL STUDY

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ABSTRACT**BACKGROUND**

Tongue lesions are one of the commonest problems in the population seen by an ENT Surgeon in the Out Patient Department. Most of them are treated by medical line of management except trauma patients, benign tumours and malignant lesions which need surgical intervention. Tongue lesions are more prevalent due to the increased usage of beetle nut and products like Pan Parag and Khaini day by day. Reverse smoking of cigars, particularly in North Coastal Andhra and Orissa the will further add to the problem. We wanted to study the incidence of tongue lesions with regard to gender, age & type of lesion. We also wanted to identify the common lesions, develop gadgets necessary in pathology and in the operation theatre for improving management.

METHODS

This study was conducted in Government ENT Hospital of Andhra Medical College in Visakhapatnam, which is a tertiary referral hospital, from October 2017 to September 2018 for a period of 12 months. The total number of patients who attended ENT OPD was 9600, out of which 288 presented with tongue lesions.

RESULTS

In this study, incidence was more in males 165 (57.3%) compared to that in females 123 (42.7%) with a male and female ratio of 1.34:1. 41-50 years was the commonest age group affected with 65 patients (22.56%). The least common age group involved was 61-70 years with 8 patients (2.77%). Aphthous ulcers aroused as the most common lesion in 72 patients (25%), followed by carcinoma tongue in 62 patients (21.52%). The least common disease reported was tongue abscess in 2 patients (0.69%).

CONCLUSION

In this study of tongue lesions, male and female ratio was 1.34:1 with male preponderance. In children the commonest lesion found was tongue tie, which is a congenital defect, and next was the retention cyst in the inferior aspect of tongue. Aphthous ulcers were found in 72 patients (25%), which occurred in both children and adults. In adults, carcinoma tongue was seen in 62 patients (21.52%).

HOW TO CITE THIS ARTICLE: Raghu Chanakya KS, Vatti N, Nirupama V, et al. Tongue lesions - a clinical study. J. Evid. Based Med. Healthc. 2019; 6(13), 1071-1073. DOI: 10.18410/jebmh/2019/223

BACKGROUND

Tongue lesions are one of the commonest health problems in the population seen by an ENT Surgeons in the Out Patient Department. Most of them are treated by medical line of management except traumatic, benign tumours and malignant lesions which are treated by surgical methods. As the usage of smoking,¹ alcohol,² beetle nut, chewing of tobacco,³ opium products like Pan Parag, Gutka and khaini are increasing day by day, the tongue lesions are also increasing. In the districts of North Coastal Andhra and Orissa the reverse smoking of cigars will further add to the predominance. The tongue tie in children, a congenital defect which produces speech and swallowing defects is the most common lesion reported. Haemangiomas, lymphangiomas are also seen in tongue since birth.

*Financial or Other, Competing Interest: None.
Submission 19-02-2019, Peer Review 26-02-2019,
Acceptance 23-03-2019, Published 30-03-2019.*

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DOI: 10.18410/jebmh/2019/223*



Aphthous ulcers⁴ due to unknown origin are the commonest lesion seen in outpatient department which are dealt mostly by medical management like antibiotics, steroids and vitamin supplements, rarely with chemical cauterization.⁵ Candidiasis of tongue is the most commonly seen in infective category. The vitamin deficiencies will also enhance the glossitis. Trophic ulcers due to sharp dental margins are seen most commonly in older age patients. Cut and lacerated injuries can occur in children due to fall on the ground while playing, in adults as a part of multiple injuries in road traffic accidents. Tongue abscess may result mostly due to prick of fish, chicken or mutton bone. The chewing of nicotine and opium products can result in leukoplakia and erythroplakia over the tongue which is premalignant lesions.

Retention cyst is the commonest benign tumour in the tongue, later are haemangioma and papilloma. In oral cancers,⁶ the tongue is one of the commonest sites next to palate. The commonest site involved in the tongue is the lateral border and next is the dorsum of tongue. The incidence of candidiasis, infective ulcers and verrucous lesions are more common in patients with immunodeficiency like HIV, post irradiation, and chemotherapy.

Aims and Objectives

1. To study the incidence of tongue lesions in relation to gender, age & type of lesion.
2. To identify the common lesions for development of the gadgets necessary in pathology and in operation theatre for excellence in management.

METHODS

This study is conducted in Government ENT Hospital of Andhra Medical College in Visakhapatnam which is a tertiary referral hospital during October 2017 to September 2018 for a period of 12 months. The total numbers of patients attended to ENT OPD were 9,600. Out of them 288 patients presented with tongue lesions.

Study Design

Retrospective study.

Inclusion Criteria

All lesions over the tongue.

Exclusion Criteria

1. Glossitis due to vitamins deficiency.
2. Pigmented lesions over the tongue.
3. Traumatic injuries of tongue.

RESULTS

Sl. No.	Sex	No. of Patients	Percentage
1.	Male	165	57.3
2.	Female	123	42.7
3.	Total	288	

Table 1. Sex Variations

In this study male (165 patients 57.3%) dominated females (123 patients 42.7%).

Male and female ratio was M:F - 1.34:1.

Sl. No.	Age Variation	No. of Patients	Percentage
1.	0-10	38	13.19
2.	11-20	24	8.33
3.	21-30	58	20.13
4.	31-40	45	15.62
5.	41-50	65	22.56
6.	51-60	50	17.36
7.	61-70	08	2.77

Table 2. Age Variation

The most common affected age group was 41- 50 years (65 patients 22.56%). Later 21-30 age group with(58 patients 20.13%), 51-60 age group with (50 patients 17.36%), 31-40 age group with (45 patients 15.62%), 0-10 age group with (38 patients 13.19%), 11-20 age group with (24 patients 8.33%) were affected in descending order. Age group 61-70 with (8 patients 2.77%) was evolved as the least.

Sl. No.	Type of Lesion	No. of Patients	Percentage
1.	Tongue Tie	18	6.25%
2.	Aphthous Ulcers	72	25%
3.	Traumatic Ulcers	20	6.94%
4.	Leukoplakia	28	9.72%
5.	Retention Cyst	17	5.90%
6.	Verrucous Papilloma	08	2.70%
7.	Haemangioma	18	6.25%
8.	Erythroplakia	12	4.16%
9.	Carcinoma Tongue	62	21.52%
10.	Abscess Tongue	02	0.69%
11.	Fissure Tongue	05	1.73%
12.	Candidiasis	22	7.63%
13.	Hairy Tongue	04	1.38%

Table 3. Types of Lesion

The most common lesion observed in this series was the aphthous ulcers (72 patients 25%).The second most common was the carcinoma tongue (62 patients 21.52%). Later were Leukoplakia (28 patients 9.72%), Candidiasis (22 patients 7.63%), Traumatic Ulcers (20 patients 6.94%), Tongue Tie (18 patients 6.25%), Haemangioma (18 patients 6.25%), Erythroplakia (12 patients 4.16%), Verrucous papilloma (8 patients 2.70%), Fissure Tongue (5 patients 1.73%), Hairy Tongue (4 patients 1.38%) identified in descending order. The least common lesion found was tongue abscess (2 patients 0.69%).

DISCUSSION

Tongue lesions can occur in any age group, but the presentation may be due to congenital or acquired. In this study the males (165) have dominated the females (123) in the number with percentages 57.3% and 42.7% respectively. The male and female ratio is 1.34:1. Mohammed Ali Al-Wesabi et al.⁷ shows incidence in male 51.6% and female 48.4% which is almost similar to our observation.

The most common age group affected in tongue lesions is 41-50 with 65 patients (22.56%). The least common age group observed in our hospital is 61-70 with 8 patients (2.77%). In between, the other age groups affected in the descending order are 21-30 age group (58 patients 20.13%), 51-60 age group (50 patients 17.36%), 31-40 age group (45 patients 15.62%), 0-10 age group (38 patients 13.19%), 11-20 age group (24 patients 8.33%).

In our tertiary referral hospital, the most common lesion of the tongue identified was Aphthous ulcer in 72 patients i.e., 25% almost one-quarter of the total number. In Preeti L, Magesh KT, Rajkumar K et al.⁸ shows aphthous ulcer in 22.8% which is almost nearer to our findings. In Crispian Scully, Stephan Pork et al.⁹ aphthous ulcers were identified

in total population as 28% which is slightly higher than our reports.

The second most common lesion was carcinoma of tongue in 62 patients (21.52%). In Byahatti SM et al.¹⁰ shows incidence of tongue carcinoma in 19.6% patients which is closer to our records. Least noted disorder was the abscess of the tongue in 2 patients (0.69%) due to prick injury of food products like fish and mutton bones.

In our series, Leukoplakia in 28 patients (9.72%), Candidiasis in 22 patients (7.63%), Traumatic Ulcers in 20 patients (6.94%), Tongue Tie in 18 patients (6.25%), Haemangioma in 18 patients (6.25%), Erythroplakia in 12 patients (4.16%), Verrucous papilloma in 8 patients (2.70%), Fissure Tongue in 5 patients (1.73%), Hairy Tongue in 4 patients (1.38%) were seen in descending order. Tongue Tie in Mohammed Ali Al-Wesabi et al.⁷ shows 1.8% which varies with ours 6.25%. Fissure tongue in Zargari O et al.¹¹ was seen in 4.5% among tongue lesions which varies slightly with our results which is 1.73%. The prevalence of fissure tongue among Saudi¹² population, 1.4% and Turkish¹³ population, 1.6% which is similar to us but in Brazilian¹⁴ population it is 27.3%, Lybian¹⁰ population, 48.4%, which varies with ours. Hairy tongue seen in Lybian,¹⁰ 4.4%, Jordan¹⁵ population, 5.8% which varies with ours 1.38%. In this series, Leukoplakia is identified in (28 patients), 9.72%, which varies with Lybian¹⁰ population, 0.3%.

CONCLUSION

In this study of tongue lesions, male preponderance was found with a male and female ratio of 1.34:1. In children, the most common lesion was tongue tie, which is a congenital defect, followed by retention cyst of minor salivary gland. The 41-50 years age group was evolved as the commonest one in tongue lesions i.e., 65 patients (22.56%) and the age group 61-70 years with 8 patients (2.77%) was the least common. Aphthous ulcers in 72 patients (25%) were seen as the most common tongue lesions which were seen in both adults and children, followed by carcinoma of tongue in 62 patients (21.52%) seen in only adults. Tongue abscess seen in 2 patients (0.69%) was the least common lesion in this series.

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