Case Report

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Hairy Tongue of Oral Cavity: A Short Review with 3 Clinical Cases

Gaurav Mishra[1*] Niharika Vyas[2] Rummaan Ahmed[3] Ganga Dubey[4] Navneet Agrawal[5]

[1]Reader, Department of Pedodontics and Preventive Dentistry, Index Institute of Dental Sciences, Indore, Madhya Pradesh, India.
[2]Senior Lecturer, Department of Pedodontics and Preventive Dentistry, Modern Dental College and Research Center, Indore, Madhya Pradesh, India.
[3]MDS, Oral and Maxillofacial Surgery, Indore, Madhya Pradesh, India.
[4]Senior Lecturer, Department of Pedodontics and Preventive Dentistry, Index Institute of Dental Sciences, Indore, Madhya Pradesh, India.
[5]Professor and Head, Department of Pedodontics and Preventive Dentistry, Index Institute of Dental Sciences, Indore, Madhya Pradesh, India.

ABSTRACT

Background: Hairy Tongue is also known as lingua villosa nigra, nigrities linguae, melanotrichia linguae etc. Hairy Tongue mainly affects the dorsum area of Tongue. Differential diagnosis of hairy Tongue includes acanthosis nigricans, oral hairy leukoplakia, pigmented fungiform papillae of the Tongue, pseudo-hairy Tongue.

Keywords: Hairy Tongue, Filiform papillae, Tongue.

INTRODUCTION

Hairy Tongue was first reported by Amatus Lusitanus in the year 1557. Lusitanus described the hairy Tongue as self-renewing hairs on the Tongue. Hairy Tongue is seen more commonly in males as compared to females. Also it is seen more frequently in elderly adults when compared to the young individual. Hairy Tongue is rarely seen in children. Hairy Tongue is described as benign, acquired and painless condition constituted by aberrant hypertrophy and filiform papillae elongation seen on the Tongue (dorsal surface)[1]. The other names for hairy Tongue are villosa nigra, nigrities linguae, hyperkeratosis of Tongue, melanotrichia linguae[2].

These elongations may vary in colours from white colour to yellowish-brown to black. These colours may depends upon certain factors like tobacco, tea, poor oral hygiene, xerostomia, various drugs like tetracyclines,steroids[3,4,5,].When symptomatic, patients suffering from hairy Tongue complains of dysguesia, Halitosis, nausea, tongue tickling[6].

In this review article, we are discussing the hairy Tongue along with 3 cases (with clinical pictures) for better understanding of the lesion which was reported in a private dental clinic in last four months

CASE REPORTS

Case 1

A 65-year-old male patient (Fig 1) reported to the private dental clinic with a chief complaint of pain in the upper back tooth region from last 3 days. He has been smoking 2 bundles of bidi for 35 years. Intra-oral examination shows poor oral hygiene with stains and calculus. On Tongue, yellowish-brown discolouration is seen that appears because of filiform papillae elongation (Fig 2).On hard tissue examination, root stumps in relation to 35 is present.

Case 2

A 61-year-old male patient (Fig 3) reported to the private dental clinic with a chief complaint of the edentulous oral cavity and wants a new set of complete denture. He has been smoking one packet cigarette daily from last 20 years and drinks alcohol 3 times a week from the last 15 years. On intra-oral

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*Correspondence Dr. Gaurav Mishra.
Department of Pedodontics and Preventive Dentistry, Index Institute of Dental Sciences, Indore, Madhya Pradesh, India.
Email: Gaurav6646@Gmail.Com

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examination, a yellowish-brown discolouration is seen on the Tongue (Fig 4).

Fig 1: Extraoral photograph.

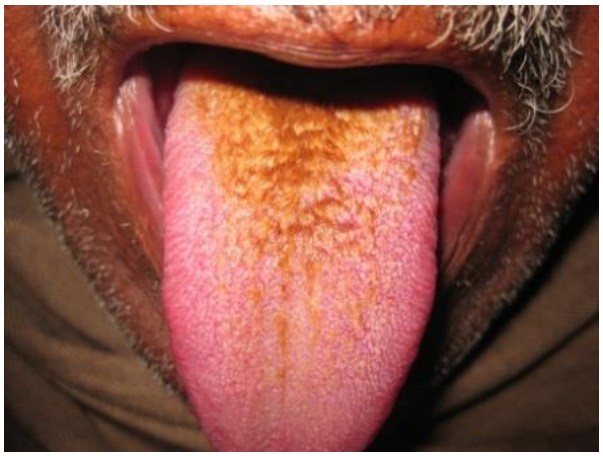

Fig 2: filiform papillae elongation.

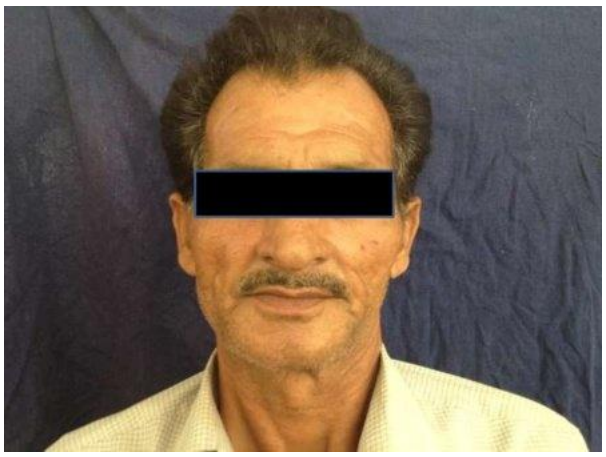

Fig 3: Extraoral photograph.

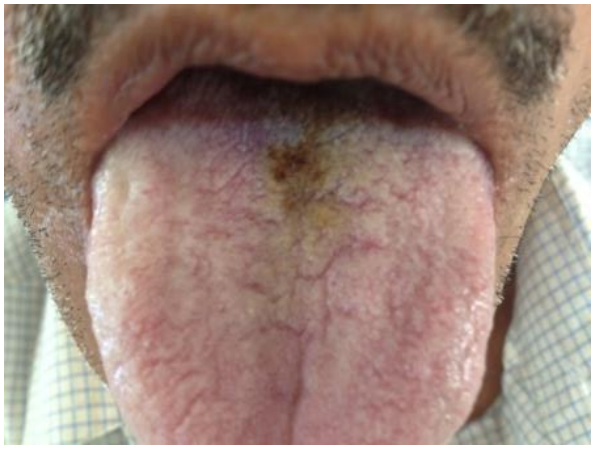

Fig 4: Yellowish-brown discolouration.

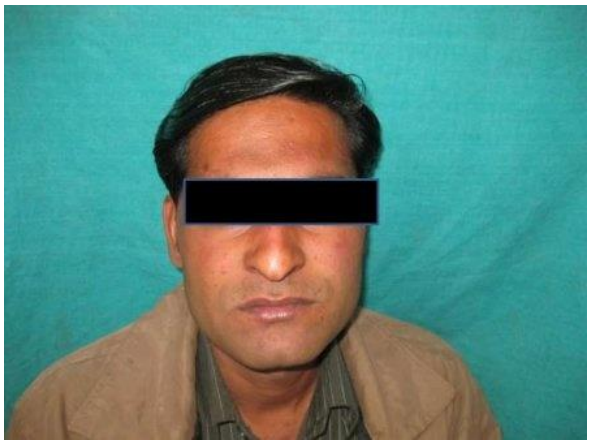

Fig 5: Extraoral photograph.

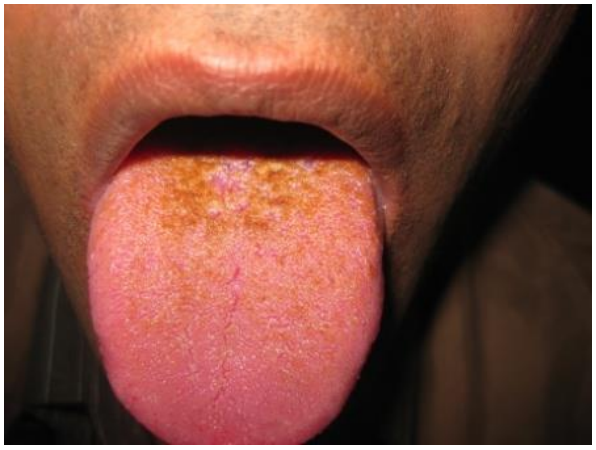

Fig 6: Golden yellowish discolouration is seen on the Tongue.

Case 3

A 26-year-old male patient (Fig 5) reported to the private dental clinic for a routine dental check-up. The patient underwent complete oral prophylaxis 6 months back. He has been smoking 5 bidi per day

from last 4 years. On intra-oral examination, golden yellowish discolouration is seen on the Tongue (Fig 6).

DISCUSSION

Hairy Tongue is also known as lingua villosa nigra, nigrities linguae, melanotrichia linguae, abnormal coating of Tongue, keratomycosis linguae and hyperkeratosis of the tongue[1,8]. Hairy Tongue mainly affects the dorsum area of Tongue. Normally, the papillae are less than 1 mm in length, but sometimes may reach up to 12-18 mm in length and attains 2mm width[2,8] Hyperkeratotic filiform papillae, as well as multiple microorganisms colonies, are the histological manifestation of hairy Tongue. Extrinsic factors like tea, coffee, tobacco and intrinsic factors like some chromogenic microorganisms are responsible for distinct colours of elongated papillae[9,10]

Differential diagnosis of hairy Tongue includes acanthosis nigricans, oral hairy leukoplakia, pigmented fungiform papillae of the Tongue, pseudo-hairy tongue[11]. There are various etiological factors which are responsible for causing hairy Tongue. These include smoking tobacco, consumption of various beverages like coffee, tea, alcohol. In some cases, it has been observed that the use of intravenous drugs leads to hairy tongue[2]. Smoking tobacco increases the chances of development of hairy tingue[12]. It is also observed that various diseased conditions for example, HIV, immunocompromised states as well as malignancies will also be considered as etiologic factor for hairy tongue[13].

For the development of hairy Tongue, few other factors are also responsible. These include pureed diet and dry mouth condition. Soft diet or pureed diet having low roughage percentage are not able to desquamate the dorsal surface of Tongue when compared to rough foods, which ultimately leads to retention of keratin on the tongue surface. When a patient underwent radiation therapy, it will cause dry mouth. This dry mouth condition in the long term will lead to hairy leukoplakia[14,15].

Variety of medicines are also contributing factor in aetiology of hairy Tongue. These medications are specifically antibiotics which includes erythromycin, linezolid, doxycycline, neomycin, penicillin[16,17,18,19]. Some antipsychotic medications and chemotherapeutic agents like erlitinib is seen causing hairy tongue[20,21]. Prognosis of hairy Tongue is very excellent as the diseases is benign or improve spontaneously.

Hyperkeratotic papillae desquamation can be encouraged by regular brushing as well as scraping either by tongue scraper or toothbrush. In few numbers of cases, topical triamcinolone acetonide, salicylic acid, genital violet, topical as well as oral retinoids can be used.anti-candidal drugs and surgical excision of papillae is considered as effective treatment[22]. In resistant hairy tongue cases, the papillae either may be clipped or removed with the help of carbon dioxide laser burning or by electrodesiccation.

In long-standing cases of hairy Tongue, the complication may arise. In such cases, candidal overgrowth is seen, which leads to burning Tongue (glossopyrosis).In severe cases, gagging sensation may also occur. Because of the retention of food particles or debris, Halitosis may also occur. Patient education is of prime importance. It includes the maintenance of proper oral hygiene and modified lifestyles. It includes alcohol and smoking stoppage. Improvement in oral hygiene may lead to the normal appearance of the Tongue. Various keratolytic agents like podophyllin can be used. Other measures taken in consideration for successful treatment of oral hairy leukoplakia includes pineapple eating, chewing gum, mouthrinses having sodium bicarbonate[13,14].

CONCLUSION

Hairy Tongue is known as a unique and benign condition. This condition is more commonly seen in those patients who are not able to maintain their oral hygiene. Medical practitioners and dentists should be well aware during the prescription of medicines as certain medicines predisposed to this condition. Prevention, as well as education, are considered as first-line management in the treatment of hairy Tongue. A patient suffering from hairy Tongue needs good maintenance of oral hygiene. Various medications like acetonide, salicylic acid can be given to the patient.

CONFLICTS OF INTEREST

The authors declare they have no potential conflict of interests regarding this article.

REFERENCES

1. Sumanth.M.Shetty, Rashmi shetty. Hairy Tongue (linguavillosa nigra): a case report. International Journal of Dental Clinics,2011, 3(3):75-6.

2. Gurvits Ge, Tan A. Black hairy tongue syndrome. World J Gastroenterol. 2014 ; 20 (31) : 10845–50

3. Vano-Galvan s, Jaen P. Black hairy tongue. Clinic Journal of Medicine. 2008;75(12):847-8.

4. Tamam I, Annagur B B. Black hairy Tongue associated with olanzapine treatment: A case report. The Mount Sinai Journal of Medicine. 2006;73(6):891-4.

5. Lawoyin D, Brown R. Drug-induced black hairy tongue: diagnosis and management challenges. Dent Today. 2008;27(1):62-3.

6. Balaji G, Maharani B, Ravichandran V, Parthasarathi T. Linezolid induced black hairy Tongue. Indian J Pharmacol. 2014; 46(6):653–4.

7. Waggoner W, Volpe A. Lingua villosa nigra-A review of black hairy tongue. J Oral Med. 1967; 22(1):18-21.

8. Mehmet Akif Camkurt, Mahmut Sami Metin, Erdem Onder Sonmez. Black hairy Tongue probably related to paroxetine use: A case report. Bulletin of clinical psychopharmacology,2015; 25(4) :321-434

9. Partha Pratim Chakraborty, Debabrata Pulai. 2013. Black hairy Tongue (lingua villosa nigra). Journal of the association of Physicians of India, 2013 ;61(12):908.

10. Athanasios K Poulopoulos, Demetrios Z Antoniades, Apostolos Epivatianos, Ioanna N Grivea, George A Syrogiannopoulos. Black hairy Tongue in a 2-month old infant . Journal of Paediatrics and child health,2008, 44, 377–9.

11.Khasawneh Fa, Moti DF, Zorek JA. Linezolid-induced black hairy tongue: a case report. J med case rep.,2013, 7(1):46.

12. Avcu N, Kanli A. The prevalence of tongue lesions in 5150 Turkish dental outpatients. Oral Dis. 2003;9(4):188–95.

13. Farman AG. Hairy tongue (lingua villosa). J Oral Med. 1977;32(3):85–91

14. Cheshire WP. Unilateral black hairy Tongue in trigeminal neuralgia Headache. 2004;44(9):908–10

15. Thompson DF, Kessler TL. Drug-induced black hairy Tongue. Pharmacotherapy. 2010;30(6):585–93.

16. Nisa L, Giger R. Black hairy tongue. Am J Med. 2011;124(9):816–7.

17. Pigatto PD, Spadari F, Meroni L, Guzzi G. Black hairy Tongue associated with long-term oral erythromycin use. J Eur Acad Dermatol Venereol. 2008;22(10):1269–70.

18. Sheikh Z, Khan AS, Khan S. Lingua villosa nigra. Lancet. 2011;377(9772):1183

19. Refaat M, Hyle E, Malhotra R, Seidman D, Dey B. Linezolidinduced lingua villosa nigra. Am J Med. 2008;121(6):e1.

20. Heymann WR. Psychotropic agent-induced black hairy Tongue. Cutis. 2000;66(1):25–6.

21. Camkurt M, Metin M, Sonmez E. A case of probable paroxetine induced black hairy Tongue. Klin Psikofarmakol Bulteni. 2015;25:403–6.

22. Ken Kobayashi, Yasuhiko Takei, Mizuki Sawada, Sumiko Ishizaki, Haruo Ito and Masaru Tanaka . Dermoscopic features of a black hairy tongue in 2 japanese patients. Dermatology research and practice volume 2010, article id 145878.

23. McGrath EE, Bardsley P, Basran G. Black hairy Tongue: what is your call? CMAJ. 2008;178(9):1137–8.

24. Bouquot, Brad W. Neville ,Douglas D. Damm, Carl M. Allen, Jerry E.. Oral & Maxillofacial Pathology.2nd ed. Philadelphia: W.B. Saunders; 2002;13–14.

25. Scully, Crispian. Oral and Maxillofacial Medicine : The basis of diagnosis and treatment (2nd ed. Edinburgh: Churchill livingstone;2008, 349.