

Black Hairy Tongue in a 65-Year-Old Diabetic Woman

Altmış Beş Yaşında Diyabetik Kadın Hastada Siyah Kılılı Dil

Göknur Kalkan, Yalçın Baş, Havva Yıldız Seçkin, Salim Karahan

Gaziosmanpaşa Üniversitesi Tıp Fakültesi, Dermatoloji Anabilim Dalı, Tokat

Özet

Lingua villosa nigra olarak da adlandırılan siyah kılılı dil; çeşitli tetikleyici faktörler nedeniyle oluşan dil sırtında anormal kahverengi siyah renk değişikliği ile karakterize ağrısız, asemptomatik benign bir bozukluktur. Sıklıkla oral hijyeni bozuk, sigara ve antibiyotik kullanımı olan 40 yaş üstü kişilerde görülür. Burada siyah kılılı dil nedeniyle polikliniğimize başvuran 65 yaşında diyabetik kadın hasta sunulmaktadır. Bu vaka aracılığıyla, bu hastalık tekrar gözden geçirilecek ve günlük pratikte nadiren görülen bu hastalık hatırlatılmış olunacak ve tedavide oral hijyene dikkat etmenin önemi ve fırçalama teknikleri anlatılacaktır.

Anahtar kelimeler: Siyah, kılılı, dil, filiform, papilla

Abstract

Black hairy tongue, also named as lingua villosa nigra, is a painless, asymptomatic, benign condition characterized by an abnormal brownish-black discoloration of the dorsal surface of the tongue caused by variety of precipitating factors. It usually appears in people over age 40 years with a history of poor oral hygiene, smoking and antibiotic use. Here we report a case of 65-year-old diabetic woman patient presented to our outpatient clinic with black hairy tongue. By means of this case, data about this disorder will be able to reviewed and reminded to be aware of this rarely seen disease in daily practice and advise to pay more attention to oral hygiene and brushing techniques that will help treating this disorder.

Key words: Black, hairy, tongue, filiform, papillae

INTRODUCTION

Black hairy tongue, also named as lingua villosa nigra, is a painless, asymptomatic, benign condition characterized by an abnormal brownish-black coating of the dorsal surface of the tongue caused by variety of precipitating factors, such as chronic smoking, poor oral hygiene, tooth loss, chronic or extensive use of antibiotics, and radiation therapy to the head and neck (1). Although its exact pathogenesis can not be illuminated enough yet, it is thought to be related to defective desquamation and reactive hypertrophy of the filiform papillae and secondary infection of candida albicans and/or bacillus subtilis varietas niger can frequently be involved (2). Here we report a case of 65-year-old woman patient presented to our outpatient clinic with black hairy tongue. By means of this case, data about this disorder will be able to reviewed.

CASE

A 61-year-old woman presented with an asymptomatic black discoloration of the tongue that she noticed 1 week earlier. Her personal history included type 2 diabetes mellitus for 20 years. The patient pointed out that, after stopping of oral anti-diabetic drugs, her treatment for diabetes continued with only insulin injections. However, the control of diabetes could not be regulated and this black-brownish coloring of the tongue appeared. She has also been a patient of hypertension and coronary heart disease for 15 years. Her family history was unremarkable by means of any dermatological diseases. The patient was completely asymptomatic. She said that the condition did not itch or hurt and did not affect the movements of his mouth and tongue. She did not have odynophagia or glossodynia. Our patient did not have habit of

smoking, coffee and alcohol consumption. Dermatological examination of the lesion revealed a black discoloration with hairy elevation of the filiform papillae on the dorsal surface of the tongue (Figure 1). A KOH examination and fungal culture from the tongue surface were negative. Skin swab cultures from the dorsal surface of the tongue produced showed no bacterial overgrowth. She rejected any further examination like a skin biopsy. According to the clinical findings, diagnosis of BHT was established. Brushing his tongue with a soft tooth and baking soda containing toothpaste twice daily was recommended, and she was also advised to pay more attention to her oral hygiene. Nystatin oral suspension 100 000 units/mL 4 times a day was recommended as medical treatment. A follow up visit four weeks later showed complete resolution of tongue discoloration (Figure 2).

DISCUSSION

Black hairy tongue, is a benign and self-limiting disorder that the hairy appearance is due to the elongation of keratinized filiform papillae and the discoloration due to chromogenic organisms (e.g. Candida species), extrinsic factors (tea, coffee, alcohol, smoking), medications (e.g. tetracycline, doxycycline, bismuth, linezolid, olanzapine, erythromycin) and poor oral hygiene can be observed (3). The prevalence of the black hairy tongue, increases with age (4). Black hairy tongue usually appears in people over age 40 years with a history of poor oral hygiene, smoking and antibiotic use. Black hairy tongue has also been reported following stem cell transplantation. It is uncommon in infants (5,6). BHT usually presents without any associated symptoms, but in some cases, symptoms such as alteration of taste (metallic taste), nausea or halitosis may occur. Feeling of tickling or gagging in the soft palate during



Figure 1. Black discoloration on the dorsal surface of the tongue



Figure 2. Two weeks later almost complete resolution of tongue

swallowing and glossopyrosis (burning tongue). can also be observed (7,8). Our patient remarked that she did not smoke and drink coffee or alcohol. Our patient was asymptomatic, she did not mention any odynophagia /glossodynia or taste change. Kobayashi et al. reported dermoscopic features of a black hairy tongue in 2 Japanese patients. They have shown characteristic dermoscopic features of brownish hair-like elongation of filiform papillae with whitish lingual papillae. And they concluded that dermoscopic examination seemed useful as an adjunct to the diagnosis and treatment of this benign disorder of the tongue (2). To manage BHT, the most rational thing is to find the main factor causing it. There are various treatment alternatives. Simply brushing the tongue with a toothbrush after application of 40% urea, or using a tongue scraper is sufficient to remove the elongated filiform papillae and to retard the growth of new ones (8). If bacteria and fungal pathogens are found within the elongated folium papillae, corresponding antibiotics and antifungal medications can be useful (9). Increasing hydration and salivation (e.g., chewing gum), discontinuing smoking or applying topical retinoids or salicylic acid have also been effective. In infants, disorder is most often self-limiting and resolves within weeks (5). Even if in our patient, a KOH examination and fungal culture from the tongue surface were negative, we have started nystatin oral suspension 100000 units/mL 4 times a day and brushing his tongue with a soft tooth and baking soda containing toothpaste twice daily was suggested. Two weeks later almost complete resolution of tongue discoloration was observed.

Consequently, we should be aware of this rarely seen disease in daily practice and know that by advising to pay more attention to oral hygiene and brushing techniques will provide this black hairy coating appearance to be disappeared easily.

REFERENCES

1. Körber A, Dissemond J. Black hairy tongue. *N Engl J Med* 2006;354:67.
2. Kobayashi K, Takei Y, Sawada M, Ishizaki S, Ito H, Tanaka M. Dermoscopic features of a black hairy tongue in 2 Japanese patients. *Dermatol Res Pract* 2010;2010. pii: 145878. doi: 10.1155/2010/145878. Epub 2010 Jul 26.
3. Taybos G. Oral changes associated with tobacco use. *Am J Med Sci* 2003; 326: 179-82.
4. Avcu N, Kanli A. The prevalence of tongue lesions in 5150 Turkish dental outpatients. *Oral Dis* 9: 188-195, 2003.
5. Pouloupoulos AK, Antoniadis DZ, Epivatianos A, et al. Black hairy tongue in a 2-month-old infant. *J Paediatr Child Health* 2008;44:377-9.
6. Thompson DF, Kessler TL. Drug-induced black hairy tongue. *Pharmacotherapy* 2010;30:585-93.
7. Sarti GM, Haddy RI, Schaffer D, Kihm J. Black hairy tongue. *Am Fam Physician* 1990; 41: 1751-5.
8. Manabe M, Lim HW, Winzer M, Loomis CA. Architectural organization of filiform papillae in normal and black hairy tongue epithelium: dissection of differentiation pathways in a complex human epithelium according to their patterns of keratin expression. *Arch Dermatol* 1999; 135: 177-81.
9. Luo Y, Zou P, Li QB, You Y. Black hairy tongue associated with allo peripheral blood hematopoietic stem cell transplantation. *Chin Med J (Engl)*. 2010;123(13):1807-8.