Research and Reviews: Journal of Dental Sciences

Fissured Tongue In Psoriatic Patient- A Case Report.

Sura Ali Fuoad1*, and Prathibha Prasad2.

- ¹Department of Oral Medicine, College of Dentistry, Gulf Medical University, Ajman, UAE.
- ²Department of Oral and Maxillofacial Pathology, College of Dentistry, Gulf Medical University, Ajman, UAE.

Short Communication

Received: 05/12/2013 Revised: 20/12/2013 Accepted: 25/12/2013

*For Correspondence

Department of Oral Medicine, College of Dentistry, Gulf Medical University, Ajman, UAE,

Keywords: fissured tongue, nonspecific tongue lesions, psoriasis, symptoms.

ABSTRACT

Fissured tongue is a common benign condition of unknown etiology, Clinically it is seen as central groove could be associated with multiple fissures differs in numbers, depth and directions, usually are a symptomatic but could be associated with halitosis and burning pain. Fissured tongue is one of the nonspecific tongue lesions are frequently observed in psoriatic patients, on the other hand oral psoriasis is rare. Family history plays a role in both psoriasis and fissured tongue.

INTRODUCTION

Fissured tongue, also termed, lingua plicata, lingua fissurata, grooved tongue, scrotal tongue is a common benign condition of unknown etiology and frequently found in healthy people. Clinically it is seen as anteroposteriorly oriented fissures on the dorsal surface of the tongue, covering the entire dorsum, or may occur in isolated areas. Often with different numbers and patterns of branching, fissures extending laterally or in all directions. Usually it is asymptomatic with depth of fissures ranging from 2 -3 mm and may extend up to 6 mm [1,2,3,4,5].

Although it's asymptomatic, the accumulation of food in the fissures can lead to focal glossitis and halitosis. These complications could be reduced by maintaining a good oral hygiene with gentle brushing of the tongue. Other general measures include avoiding alcohol, tobacco and foods that irritate the mucosa of the tongue^[5,6].

Psoriasis is a common disease of the skin that affects equally both gender and it is more common in Caucasian population [7]. It first develops in young adults and then follows periods of exacerbation and remission [8]. Psoriasis is a multifactorial disease. Complex genetics and environmental factors interact to produce immunological aberrations which result in the psoriasis phenotype [3,8,9]. In psoriatic cases, nonspecific tongue lesions are frequently observed.

CASE REPORT

A 35 years male, visited the dental center in Gulf medical hospital and research centre located in Ajman /UAE. His chief complaint was pain in the lower lip lining, of one day duration, which aggravated on eating, drinking even during speaking.

During patient interview, demographic information reveals that he is an engineer, and sheesha smoker. Family history shows psoriasis was diagnosed in his father and 2 brothers while systemic review shows that he had 19 years history of psoriasis and he had history of medication for the past six months. He had been taking Methotrexate tablets and that the patient is allergic to penicillin. The patient had not visit the dentist in his entire life.

Extra oral examination demonstrated a wide distribution of pustular psoriasis on lower part of the neck and the upper part of the back with symptoms of itching. The lesion is widely distributed on his body. Intra oral examination revealed fair oral hygiene with calculus accumulation on the lingual surface of the lower anterior teeth. In regards to the patient's chief complaint, five small ulcers of approximately 0.3 centimeter in diameter were found on the mucosal lining of the lower lip.

The tongue showed thickening of coating, a deep central groove of about 0.4 centimeter in depth with prominent numerous fissures found all over the dorsal surface of the tongue and even extending to the lateral borders of the tongue. The fissuring is asymptomatic and the patient said that all his family members had the same tongue grooves. The patient was following up with a dermatologist for psoriasis treatment. Instruction for good oral hygiene was given to the patient and referral to periodontist for oral prophylaxis was done. Instruction for avoiding irritating food and drink was given, and kenaloge in ora base was prescribed to be applied on the ulcers.







DISCUSSION

Fissure tongue was more common in pustular psoriasis [1,3]. Heredity found to play a role, and suggestion comes that fissured tongue might represent an autosomal dominant inheritance with incomplete penetrance or may be polygenic trait. From childhood patients usually have fissured tongue, but the condition may become more prominent with advancing age. Our case reflected these findings.

In patients with psoriasis, the existence of alterations in oral mucosa is a controversial topic^[8,10]; while some researchers—accept the existence of oral lesions as an oral manifestation of psoriasis based on histopathological similarities between them, others claim that oral lesions need to follow a parallel course to the cutaneous disease in order to accept them as the same entity.

The studies analyzed the prevalence of oral lesions in patients with psoriasis and patients without it and particularly the association of this dermatosis to geographic tongue, fissured tongue, and others .They have been found frequently in patients with this dermatitis and the literature consider them as possible oral manifestations of this disease^[8,11]; it is necessary to evaluate the incidence of these lesions in patients with and without psoriasis(10).In general psoriasis rarelyaffects oral mucosa^[3].

On the other hand oral lesions in psoriasis can be divided into two main groups. The first one includes oralpsoriatic lesions proved by biopsy with skin lesions run in parallel. They may remain undetected, or rare. The second group involves nonspecific lesions as an oral finding in psoriasis such as fissured tongue, and psoriasiform lesions such as benign migratory glossitis^[11].

Fissured tongue is believed to be an inherited trait. The frequency of FT increases with age in older people and has an estimated prevalence of up to 20% in the general population, and has been associated with Melkerson-Rosenthal syndrome and Down's syndrome [1,4,5,6,12]. No such association was seen in our case.

Fissured tongue was found in 45.33% of psoriatic patients in Singh et al $^{[6]}$ study on 800 patients with psoriasis while Enno Ch et al in their study found that 47.5% of psoriatic patients were having it in his study on 80 patients $^{[7]}$. Our study correlates with these studies confirming some association.

According to the age of psoriasis onset, the individuals were classified as having early psoriasis (starting beforeor equal the age of 40 and late psoriasis (after the age of40); most of the individuals (71.2%) had late psoriasis. A greater proportion of fissured tongue was detected in individuals with late psoriasis (31 cases, 54.4%) and only seven cases(30.4%) occurred in the early stage (p< 0.05)^[10].In our case, though the patient was aware of the tongue lesions, it was detected accidentally at a later age when he visited for dental treatment.

Francisco Hernndez Pérez et al conclude that geographic tongue and fissured tongue have not been clearlyidentified as definitive oral manifestations of psoriasis. Although these lesions present histopathological similarities with psoriasis, it has not been recognized a parallel course to the dermatological manifestations of the disease^[10].

REFERENCES

- 1. Maryam Daneshpazhooh, Homayoon Moslehi, Maryam Akhyani and Marjan Etesami. Tongue lesions in psoriasis: a controlled study.BMC Dermatol. 2004:4:16.
- 2. Lluís Nisa, MD and Roland Giger, MD .Lingua plicata. CMAJ. 2012; 184(4): E241.
- 3. Singh S, Nivash S, Mann BK. Matched case-control study to examine association of psoriasis and migratory glossitis in India. Indian J Dermatol Venereol Leprol. 2013;79-1:59-64.
- 4. M Rathee, A Hooda, A Kumar. Fissured Tongue: A Case Report and Review of Literature. The Int J Nutr Well. 2009:10:1.
- 5. Yarom N, Cantony U, Gorsky M. Prevalence of fissured tongue, geographic tongue and median rhomboid glossitis among Israeli adults of different ethnic origins. Dermatol. 2004; 209: 88-94.
- 6. Reamy BV, Derby R, Blunt CW. Common tongue conditions in primary care. Am Fam Physician. 2010;81:627–34.
- 7. Enno Ch, Ulrich M. Psoriasis. En: Fitzpatrick TB, editors. Dermatologíaen medicina general. Buenos Aires: MedicaPanamericana; 2001:527 51.
- 8. Elder JT, Nair RP, Henseler T, Jenisch S, Stuart P, Chia N, Christophers E, Voorhees JJ: The genetics of psoriasis 2001: the odyssey continues. Arch Dermatol. 2001.137: 1447e1454.
- 9. Chandran V. The Genetics of Psoriasis and Psoriatic Arthritis. Clin Rev Allergy Immunol.2013;;44(2):149-56.
- 10. Francisco Hernndez Pérez, Alejandra Jaimes Aveldanez, Ma. de Lourdes Urquizo Ruvalcaba, Moises Diaz Barcelot, Maria Esther Irigoyen Camacho, Ma. Elisa Vega Memije, Adalberto Mosqueda Taylor. Prevalence of oral lesions in patients with psoriasis. Med Oral Patol Oral Cir Bucal. 2008;13(11):E703-8.
- 11. Femiano F: Geographic tongue (migrant glossitis) and psoriasis. Minerva Stomatol.2001;50:213-7.
- 12. Avcu N, Kanli A. The prevalence of tongue lesions in 5150 Turkish dental outpatients. Oral Dis 2003;9:188-95.