SHORT COMMUNICATION

The Twofold Trouble – A Case of Fissured Tongue Syndrome

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ABSTRACT

The tongue plays a vital role in deglutition, taste and speech. An abnormality or unhealthy tongue would make food intake troublesome, thereby depriving the individual of adequate essential nutrients. A fissured tongue is a malformation characterized by furrows or grooves on the dorsum of the tongue. On the other hand, geographic tongue is a benign recurrent condition of uncertain aetiology affecting the tongue characterized by loss of epithelium especially filiform papillae giving a
characteristic appearance. These conditions may be asymptomatic or cause of discomfort to the patient. There are seldom case reports in literature of having seen these two conditions concurrently.

**Keywords:** Tongue Diseases, Fissured Tongue, Benign Migratory Glossitis

1. **INTRODUCTION**

   Fissured tongue, also known as scrotal tongue, furrowed tongue or plicated tongue is a benign condition on the tongue distinguished by deep fissures or grooves on the dorsum of the tongue. The condition is usually painless, although these grooves may look perturbing to the patient and observer\(^\text{[1]}\). Geographic tongue or benign migratory glossitis or wandering rash is a benign recurrent condition of uncertain aetiology affecting the tongue, characterized by loss of epithelium especially filiform papillae giving a characteristic appearance. The clinical presentation can vary from being asymptomatic to painful and burning ulceration\(^\text{[2]}\). Hereby, we present a case of a patient who had had both geographic tongue and fissured tongue simultaneously.

2. **CASE REPORT**

   A 32-year-old medically fit male patient came with a chief complaint of an ill-fitting prosthetic crown in upper right back tooth region. Past medical, dental, family and personal histories were non-contributory. Intra-oral examination revealed incidental findings on the tongue. A solitary erythematous lesion, irregular in shape, measuring about 2 × 1.5 cm in size in its maximum dimensions, along the midline of tongue was seen on the dorsal surface [Figure 1 - A]. The lesion had raised whitish circinate borders with irregular margins surrounded by erythematous halo around. The lesions showed areas of depapillation with loss of filiform papillae and was covered with a whitish coat which detached on rasping.

   The tongue also appeared to have deep multiple grooves measuring about 1 - 2.5 cm; one solitary groove along the midline and multiple other grooves on the dorsal surface predominantly on the right and left lateral borders of the tongue giving a diffuse pattern [Figure 1 - B]. On further questioning the patient agreed upon having a history of halitosis and mild occasional burning sensation on tongue since over one-year, which he had mostly ignored. A provisional diagnosis of geographic tongue and fissured tongue was given. Patient was advised to incorporate better oral hygiene aids in his routine, prescribed a mouthwash and was recommended to incorporate a balanced diet into his routine. He was further referred to department of prosthodontics for evaluation and replacement for the ill-fitting crown.

3. **DISCUSSION**

   Fissured tongue is a common variant of the tongue that has numerous grooves or fissures on the dorsum of the tongue\(^\text{[3]}\). Males are more commonly affected as seen in our case. The condition may be seen at any age, but generally affects older people more frequently\(^\text{[4]}\). Fissuring of the tongue is seen in patients with pernicious anaemia, Sjogren’s
syndrome, Down syndrome, Melkersson-Rosenthal syndrome and sometimes in Cowden’s syndrome \cite{5}. Kullaa-Mikkonen had categorized fissured tongue into two types – (i) Fissure tongue with normal filiform papillae. (ii) Fissure tongue syndrome; where fissures are associated with geographical tongue which was seen in our case \cite{6}.

Literature also delineates that in a type called the severe diffuse form \cite{7}, there are numerous fissures which cover the entire dorsum of the tongue, dividing the tongue papillae into multiple separate ‘icelands’ or lobules which also concurred to our case \cite{8}. From the perspective of treatment, both geographic and fissured tongue being benign conditions, usually specific treatment is not indicated. However, in patients suffering with a severe symptomatic form, the first goal of management should be to discover the cause of irritation and to take local measures to resolve the clinical manifestations must be attempted. The patient should be encouraged to maintain oral hygiene and incorporate a balanced diet \cite{9}.

![Figure 1. A – Geographic Tongue on the Dorsum of Tongue. B – Severe Diffuse form of Fissured Tongue.](image)

**4. CONCLUSION**

Fissured tongue and geographic tongue are commonly encountered tongue diseases in dental practice. But, a lack of knowledge amongst the dental practitioners on its appearance, different patterns, severity, and association with various systemic disorders and other tongue anomalies is an area usually neglected or ignored, thus a problem looming at large.
References


