

# Diffuse Fissured Tongue: The Incidental Icelands - A Case Report

**Keywords:** Fissured tongue; Diffuse; Burning sensation

## Abstract

The tongue plays an important role in speech, taste and deglutition. Any disease of the tongue makes the intake of food difficult thereby depriving the individual of adequate essential nutrients. Fissured tongue is a commonly encountered tongue disorder in dental practice. But, a lack of knowledge amongst the dental practitioners on its appearance, different patterns, severity, and association of fissuring with various systemic disorders and other tongue anomalies is an area usually neglected or ignored, thus a problem looming at large. Thus, it is essentially important and the need of the hour that every dentist should be made well aware of such underrated pathologies and its possible implications.

## Introduction

A fissured tongue is a malformation characterized by furrows or grooves on the dorsum of the tongue. It is generally painless, but accumulation of food debris and the resultant irritation might cause pain [1]. Fissured tongue is an inherited disorder manifested with grooves that can vary in size and depth. A definite aetiology does not exist, but a polygenic mode of inheritance is postulated. It is usually an incidental finding diagnosed during the routine intra oral examination [2]. Hereby, we report a case of a 31-year-old patient with fissured tongue, who had an associated complain of mild burning sensation as well.

## Case Report

A 31-year-old medically fit male patient reported to our department with a complain of stains and food deposit inside the mouth with associated halitosis and an occasional complain of mild burning sensation on tongue while consuming spicy food or hot beverages. The history of burning dated back to at least one year prior to date. Patient gave history of tobacco chewing and smoking since ten years. Intra oral examination revealed generalized moderate amount of stains and calculus deposits on teeth, tongue appeared to have deep multiple grooves measuring about 1-2 cm, a few on the dorsal surface and predominantly on the right and left lateral borders of the tongue giving a diffuse pattern (Figure 1). A provisional diagnosis of fissured tongue was established. The patient was advised to stop his deleterious habits, was prescribed a mouthwash and was recommended to incorporate a balanced diet into his routine. The patient was referred to department of periodontics for oral prophylaxis.

## Discussion

In the medical philosophies, the tongue has been believed to be an indicator of health for several decades. Customarily, the tongue is known to be a mirror of the oral and general health. Hippocrates, Galen, and others considered the tongue as the barometer of health [3].



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**Figure 1:** Fissured tongue on the dorsum and lateral borders of the tongue.

Fissured tongue, also known as scrotal tongue, lingua plicata, plicated tongue or furrowed tongue is a benign condition characterized by deep grooves or fissures in the dorsum of the tongue. Although these grooves may look unsettling, the condition is usually painless [4]. Males are more commonly affected. The condition may be seen at any age, but generally affects older people more frequently. Kullaa-Mikkonen described two types of fissured tongue-fissure tongue with normal filiform papillae; and fissure tongue syndrome, where fissures are associated with geographical tongue [5].

The aetiology is largely unknown but studies have shown that hereditary plays a significant role. Aging and local environmental factors may also contribute to its development. Fissured tongue may present as an independent manifestation or associated with certain underlying syndromes or familial conditions. Conditions associated with fissured tongue include Melkersson-Rosenthal syndrome, Down syndrome, Acromegaly, Sjogren's syndrome, Oro-facial granulomatosis, Psoriasis and Geographical tongue [6].

Sudarshan R et al. had recently classified fissured tongue broadly under three categories: Based on pattern, based on number and based on associated symptoms [7]. As per their classification, our case would fall under as diffuse spreading in terms of pattern, severe in terms of number since the fissures are more than 10 in number and with associated symptoms since the patient had mild burning sensation.

Literature narrates that in the severe diffuse form, numerous fissures cover the entire dorsal surface dividing the tongue papillae into multiple separate “icelands” or lobules which is a classic correlation to our case [6].

Burning sensation on the tongue may probably correlate with the systemic factors and poor oral hygiene. Local factors implicated in the aetiology are ill fitting prosthesis, infection, parafunctional habits, allergic reaction, xerostomia and galvanism, and so forth [8]. Systemic factors concerned with burning sensation include medication, anaemia, oesophageal reflux, deficiency of vitamin B complex, zinc, iron, oesophageal reflux, and psychological factors [9].

On the treatment front, fissured tongue being a benign condition, no specific treatment is indicated. But in patients with a severe condition or with associated symptoms, the first goal of management should be discovery of the irritating cause and local measures to resolve the clinical manifestations must be attempted. The patient should be encouraged to maintain oral hygiene and incorporate a balanced diet [10].

## Conclusion

It is aptly said, “The only true good is knowledge, the only true evil is ignorance”. Fissured tongue is one of those pathologies which is predominantly ignored, frequently misdiagnosed and eventually over-treated. Thus, a thorough knowledge can help a long way in timely diagnosis and advocating the required treatment regimen

based on the local irritating factors which cumulate to the condition in the first place.

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