

**Association Between Fissured Tongue and Systemic Diseases: A
Contemporary Review**

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Abstract. Recent studies indicate that fissured tongue may be associated with various systemic disorders, including psoriasis, diabetes mellitus, Down syndrome, and Melkersson–Rosenthal syndrome. The present review summarizes contemporary data regarding the relationship between fissured tongue and systemic pathology. Current evidence suggests that fissured tongue may serve as an important oral marker of underlying systemic disease. Recognition of this condition during routine dental examination may contribute to early diagnosis and comprehensive patient management.

Keywords: fissured tongue, systemic diseases, psoriasis, diabetes mellitus, oral manifestations, oral medicine.

Fissured tongue is considered one of the most common benign developmental anomalies of the tongue. In recent years, increasing attention has been directed toward its possible association with systemic diseases and syndromic conditions. The aim of this review was to analyze contemporary literature regarding the relationship between fissured tongue and systemic pathology.

Current evidence suggests that fissured tongue may occur not only as an isolated anatomical variation but also as an oral manifestation of systemic disorders. Numerous studies have demonstrated significant associations between fissured tongue and psoriasis, diabetes mellitus, Down syndrome, Melkersson–Rosenthal syndrome, nutritional deficiencies, and immunological disturbances. The prevalence and severity of fissuring appear to increase with age and in patients with chronic systemic diseases.

Several pathogenic mechanisms have been proposed, including genetic predisposition, chronic inflammatory changes, epithelial degeneration, xerostomia, and altered immune response. Histopathological investigations reveal epithelial

hyperplasia, elongation of rete ridges, and chronic inflammatory infiltration, supporting the role of persistent inflammation in the development of fissures.

Recognition of fissured tongue during routine oral examination may therefore provide valuable diagnostic information regarding underlying systemic conditions. Dental practitioners should consider comprehensive clinical evaluation of patients presenting with pronounced or symptomatic fissured tongue, especially in the presence of accompanying oral lesions or systemic complaints.

Further multidisciplinary investigations are necessary to clarify the etiopathogenetic relationship between fissured tongue and systemic diseases and to determine its potential role as a clinical diagnostic marker.