



## Geographic with Scrotal tongue in a 9 year old child

Authors

**Dr Ritu Rani<sup>1</sup>, Dr Mudita Gupta<sup>2</sup>, Dr Reena K Sharma<sup>3</sup>**

<sup>1</sup>Dermatologist, Civil Hospital Kangra, H.P.

<sup>2</sup>Assistant Professor, Department of Dermatology, IGMC, Shimla

<sup>3</sup>Dermatologist, Civil Hospital Kangra

\*Corresponding Author

**Dr Reena K Sharma**

Dermatologist, Civil Hospital Kangra

### Abstract

*Geographic tongue is a benign condition affecting the dorsum of tongue. The migratory nature and the serpiginous lesions with white elevated borders define this condition. Coexistence of geographic tongue with scrotal tongue has been rarely reported in literature. We present an interesting case of geographic with scrotal tongue in a 9 year old boy. The parents were reassured about the condition and only symptomatic treatment was given to the boy.*

**Keywords:** *geographic; scrotal; papillae; fissures.*

### Introduction

Geographic tongue also known as benign migratory glossitis is a transient and recurrent condition. It is characterised by episodic loss of the filiform papillae on the dorsum of the tongue and presents with erythematous patches and whitish margins across the surface of the tongue.<sup>[1]</sup> The scrotal tongue or fissured tongue is also a benign condition characterized by presence of deep fissures on surface of the tongue.<sup>[2]</sup> We hereby describe a case of geographic with scrotal tongue simultaneously in a 9 year old boy.

### Case Report

A 9 year old boy presented with multiple red colored lesions and fissures on the tongue from last 1 year. The lesions were asymptomatic except for mild burning sensation after eating spicy food.

On clinical examination there were multiple well circumscribed depapillated erythematous patches with whitish margins along with multiple fissures on the dorsum of tongue. No other oral or skin lesions were found. The patient was asymptomatic but parents were concerned about the visual appearance of the tongue. History revealed that the lesions used to disappear from one side only to appear again at some other side of tongue. Based on typical clinical appearance and the migratory nature of the lesions, the diagnosis of geographic with scrotal tongue was made. We counseled the parents about the condition and prescribed multivitamins along with local anesthetic agent for symptomatic relief.



Fig 1

**Figure 1.** Multiple erythematous serpiginous lesions with elevated white borders and deep fissures on dorsal aspect of tongue

### Discussion

Geographic Tongue is a benign condition that predominantly affects the dorsum and lateral aspect of the tongue. It is characterized by multifocal depapillated erythematous lesions with an elevated whitish border.<sup>[1]</sup> It is commonly reported in children 4–4½ years of age.<sup>[3]</sup> The word geographic denotes the similarity to land masses and areas on the map.<sup>[4,5]</sup> Although the etiology is not known but it can be associated with the conditions like atopy,<sup>[6]</sup> allergies,<sup>[7]</sup> psoriasis,<sup>[8]</sup> anemia, vitamin deficiencies, syndromes like down syndrome, foetal hydantoin syndrome, stress, psychosomatic factors and hormonal influences.<sup>[9]</sup> The positive family history in some reports suggests the role of genetic factors in its etiology. Higher prevalence of geographical tongue in parents and siblings of affected individuals, suggested a polygenic mode of inheritance.<sup>[10]</sup> Three patterns of geographical tongue have been described. These include oblate, spiral, and wavy 1D pattern.<sup>[9]</sup> Although patients are asymptomatic but may complain of burning sensation, and sensitivity to hot, and spicy food sometimes. Reassurance is the mainstay of treatment as the condition is benign and self-limiting. Symptomatic cases may be given topical

steroids, topical tretinoin,<sup>[11]</sup> topical anesthetic agents, vitamin A therapy, antihistamines, analytics, steroids and sodium bicarbonate in water.

Like geographic tongue, scrotal tongue (fissured tongue) is also a benign entity characterized by multiple fissures of variable depth on the dorsum and lateral surface of tongue. It can be seen in normal healthy individuals. Though asymptomatic, it can lead to glossitis and halitosis because accumulated debris in the fissures and the bacterial superinfection.<sup>[2]</sup> It can be associated with geographic tongue as in our case or other conditions like psoriasis, Melkersson-Rosenthal syndrome, Sjogren syndrome, Down syndrome, or pemphigus vegetans.<sup>[2]</sup> There is no definitive treatment but good oral hygiene has to be maintained to prevent the complications.<sup>[12]</sup> We highlight the association of geographic tongue with scrotal tongue in our case. The other associations should also be kept in mind while examining such cases.

### Conclusion

The geographic tongue may cause distress in the patients due to its visual appearance and requires counseling of the patients about the benign and self limiting nature of lesions. Only few case reports have been reported about the associations of geographic with scrotal tongue. Hence we have highlighted this coexistence of geographic tongue with scrotal tongue in our case.

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