## **CASE REPORT**

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# Migratory stomatitis in soft palate - case report

## **Abstract:**

Introduction: Migratory stomatitis is a benign disorder of unknown cause. Lesions are characterized by erythematous erosive areas with irregular gray-white borders. The margins are slightly protruding and resemble the contours of a geographic map. Lesions of migratory stomatitis can affect different anatomical regions. Objective: The objective of this work is to report a case of migratory stomatitis in the soft palate. Case report: A 20-year-old male presented with geographic tongue and migratory stomatitis in the soft palate. Conclusion: Migratory stomatitis can also affect atypical anatomical regions (such as the soft palate) of individuals without a history of stress and anxiety.

Keywords: Glossitis, Benign Migratory; Palate, soft; Tongue, diseases; Tongue

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## INTRODUCTION

Migratory stomatitis was first described by Cooke in the year 1955 as erythema migrans. Currently, the exact terminology for this entity still remains a problem because different denominations have been identified in the literature, such as: ectopic geographic tongue, stomatitis aerata migrans, erythema migrans and erythema circinate migrans<sup>1-3</sup>. In general, this condition is observed on the dorsal surface of the tongue and is known by geographic tongue or benign migratory glossitis.

Clinically, migratory stomatitis is characterized by the appearance of reddish atrophic plaques surrounded by white or yellow borders. In the tongue, lesions lead to the loss of filiform papillae and the onset of associated inflammatory edema<sup>4</sup>. The duration of the lesion is a fact that shows great variability. In some individuals, the lesions repair within two weeks. In other cases, the lesions continue to develop for more than one year<sup>5</sup>.

The prevalence of benign migratory glossitis in the general population varies from 1 to  $2.5\%^{6-14}$ . However, the prevalence of stomatitis migrans is not known due to its rarity.

The etiology of migratory stomatitis remains unknown. However, several patients have reported that the appearance of the lesions coincide with altered emotional states. In addition, there is remission of lesions after stress reduction<sup>15</sup>.

Patients with migratory stomatitis or benign migratory glossitis rarely report discomfort. Therefore, their diagnosis is usually established during a routine buccal examination. On the other hand, there are patients who report only a vague burning sensation on the back of the tongue. This condition appears to have no predilection for gender, race or age. According to the literature, migratory stomatitis is more prevalent in young individuals<sup>8,16-18</sup>. On the other hand, other authors have observed that most cases are seen in individuals over 40 years of age<sup>17-19</sup>. The objective of this article is to report a case of migratory stomatitis involving the soft palate.

#### **CASE REPORT**

Male patient, 20 years-old, student, sought dental treatment at the School of Dentistry at the Universidade Federal do Paraná, Curitiba, Brazil. The patient did not report any complaint to the mouth or teeth. He looked for the clinic just to have an annual check-up. During the anamnesis, no history of illness, allergy or use of medication was recorded. However, the patient reported occasionally feeling dry mouth (xerostomia).

Clinical examination revealed the presence of the geographic tongue (Figure 1). In addition, five lesions of reddish coloration and a raised yellow halo were observed on the soft palate, uvula, and tonsil pillar (Figure 2). Lesions migrated locally and, despite the inflammatory appearance, did not cause any discomfort. The patient had not observed lesions on the tongue and palate. In addition, the patient did not have any skin lesions. The diagnosis of migratory stomatitis was established based on the clinical aspect of the lesions and the migratory pattern. The presence of atrophic lichen planus, psoriasis, dermatitis, bronchitis, Reiter's syndrome and atopy were investigated. None of these comorbidities were observed. In addition, the patient denied experiencing a period of anxiety or depression.

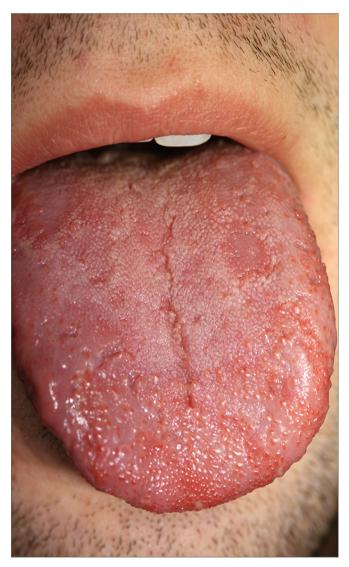


Figure 1. The patient's tongue with fissures and geographic tongue.



Figure 2. Migratory stomatitis in the soft palate, uvula and tonsil pillar.

The patient was followed weekly for a month. During this period, it was possible to observe the migratory pattern of the lesions. Finally, the patient was instructed to avoid ingesting spicy and very hot foods. In addition, he was informed that injuries could arise during situations of high stress and anxiety. He was also informed that migratory stomatitis is a benign, non-contagious condition and that lesions may recur and disappear without treatment.

Due to the dry mouth sensation, the stimulated salivary flow was measured by the volumetric method (result = 0.7~mL / min). As the patient did not have hyposalivation, no pharmacological resource was instituted. He was just instructed to drink more water or drinks throughout the day.

Because it was a benign condition and without effective treatment, the patient was advised to return for consultation if there was sensitivity or discomfort associated with the lesions.

## DISCUSSION

Geographic tongue and migratory stomatitis are asymptomatic inflammatory conditions in some cases. In this way, they may not be identified by patients or misdiagnosed by some professionals.<sup>20</sup> This article describes the case of a patient with geographic tongue and migratory stomatitis in the soft palate discovered in a routine examination.

According to Garma et al.<sup>21</sup>, the soft palate is the most uncommon anatomical region for the occurrence of this condition. A similar case of a 17-year-old individual with geographic tongue and migratory stomatitis in the soft palate was published in 2021 by Abassi et al.<sup>22</sup> The clinical appearance of migratory stomatitis lesions is well

defined. They appear as rounded, red-colored plaques. The lesion is usually surrounded by a white or yellowish halo. In general, lesions caused by migratory stomatitis are asymptomatic. Netto et al.<sup>23</sup> reported two cases of asymptomatic geographic stomatitis on the palate of adult patients. Despite its very characteristic clinical appearance, dentists must exclude other diagnostic hypotheses during patient examination, such as: reticular lichen planus, psoriasis and pseudomembranous candidosis, lichenoid reactions and secondary syphilis.<sup>24</sup> In this way, the patient's skin was examined and a complete anamnesis of the health status was performed to exclude the above mentioned conditions.

A geographic tongue classification based on lesion appearance and location was developed by Hume<sup>7</sup>. Based on this classification, the case described in this article is considered as type 2. Since the patient had geographic tongue and lesions in the oral mucosa. It means the geographic tongue is accompanied by geographic stomatitis.

In general, no type of treatment is indicated for patients with geographic tongue and/or erythema migrans. On the other hand, those patients with severe local discomfort may benefit from the use of corticosteroids. Topical tacrolimus or corticosteroids may provide relief when applied as a thin film several times a day on the lesions. Some authors also recommend the use of 0.1% triamcinolone acetonide and the combined drugs (0.05% retinoic acid and 0.1% triamcinolone acetonide in an oral base) to alleviate the discomfort caused by geographic tongue. The second sec

The diagnosis of geographic tongue and erythema *migrans* is basically clinical and they are conditions that do not require any intervention, except in those cases where discomfort is a marked symptom for the patient.<sup>27</sup> Dentists need to be careful when inspecting the soft palate, because it can be an anatomical region affected by erythema *migrans* lesions.

## **CONFLICT OF INTEREST**

The authors declare that they have no conflict of interest.

## ETHICAL APPROVAL

Data from the patient here included were treated anonymously and statement of informed consent was signed by the patient allowing the use of his dental records.

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