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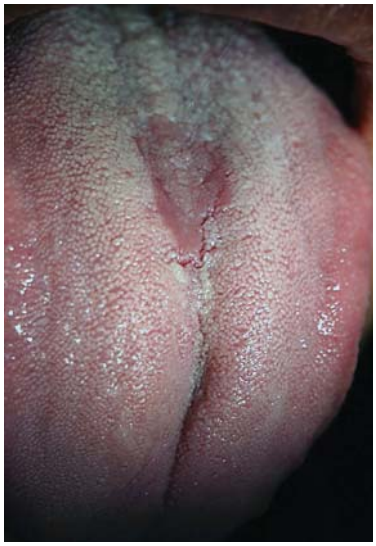
MEDIAN RHOMBOID GLOSSITIS

Typically presenting as a well-demarcated "rhomboid" area of erythema anterior to the circumvallate papillae of the mid-dorsal tongue, median rhomboid glossitis (MRG) occurs in up to 1 percent of the population.[1] MRG is classically described as a focus of symmetrical filiform papillary atrophy and may exhibit either a smooth or a lobulated surface architecture.

Historically, MRG was presumed to represent a developmental anomaly; however, due to the frequency of candidiasis associated with this lesion, contemporary literature suggests a likely contributing factor to be chronic fungal colonization. *Candida albicans* has been shown to preferentially colonize the posterior dorsal aspect of the tongue in a percentage of otherwise healthy individuals.[2] Additionally, the tongue is positioned against the palate at rest, during swallowing, and for the formation of certain vocal sounds. This constant irritation, coupled with a hospitable environment for candidal colonization, has been suggested as an underlying etiology for the development of this lesion.[3–4] Further, erythematous candidiasis of the palate—known as a so-called "kissing lesion"—secondary to intimate contact between median rhomboid glossitis and the hard palate has been described.[5–6]



Median rhomboid glossitis showing characteristic central papillary atrophy in the midline of the posterior dorsal tongue.

Asymptomatic lesions of MRG do not require treatment; however, in instances where the patient is symptomatic, empirical treatment with clotrimazole troches may lead to either complete or partial resolution of the lesion. Habitual placement of candies or breath strips on the tongue may create a similar depapillated area, although the change predominantly occurs on the middle third of the dorsal tongue (midline or lateral location). Careful history taking usually helps determine the underlying cause. An unclear etiology or an element of suspicion may warrant a biopsy for definitive diagnosis. ■

References

1. Espinoza I, Rojas R, Aranda W, Gamonal J. Prevalence of oral mucosal lesions in elderly people in Santiago, Chile. J Oral Pathol Med. 2003;32(10):571-575.
2. Arendorf TM, Walker DM. The prevalence and intra-oral distribution of *Candida albicans* in man. Arch Oral Biol. 1980;25(1):1-10.
3. Whitaker SB, Singh BB. Cause of median rhomboid glossitis. Oral Surg Oral Med Oral Pathol Oral Radiol Endod. 1996;81(4):379-380.
4. Kessler HP. Median rhomboid glossitis. Oral Surg Oral Med Oral Pathol Oral Radiol Endod. 1996;82(4):360.
5. Brown RS, Krakow AM. Median rhomboid glossitis and a "kissing" lesion of the palate. Oral Surg Oral Med Oral Pathol Oral Radiol Endod. 1996;82(5):472-473.
6. Galletta VC, Campos MS, Hirota SK, Migliari DA. Hyperplastic candidosis on the palate developed as a "kissing" lesion from median rhomboid glossitis. Braz J Otorhinolaryngol. 2010;76(1):137.

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