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Article *in* International Journal of Pharmacy and Biological Sciences · October 2016

DOI: 10.21276/ijpbs.2016.6.4.7

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International Journal of Pharmacy and Biological Sciences
ISSN: 2321-3272 (Print), ISSN: 2230-7605 (Online)
IJPBS | Volume 6 | Issue 4| OCT-DEC| 2016 | 51-53
Case Report/Review Article – Biological Sciences

MEDIAN RHOMBOID GLOSSITIS: A PECULIAR TONGUE PATHOLOGY, REPORT OF A CASE AND REVIEW OF LITERATURE

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ABSTRACT

Median rhomboid glossitis (MRG) is unique tongue pathology of uncertain etiology, typically located around the midline of dorsal surface of tongue. Clinically it appears as reddish, depapillated area usually rhomboid in shape. Due its asymptomatic nature it is considered as a benign condition which in most of the cases generally discovered on routine oral examination. In this paper, we present a first case on median rhomboid glossitis which consulted for routine dental checkup. To our knowledge MRG has never been reported in Pakistani literature. We present a case report literature review, discussion including insight regarding aetiology, clinical presentation and management of the condition.

KEY WORDS

Candidiasis, Pakistan, Tongue, glossitis, Median rhomboid

INTRODUCTION:

Median rhomboid glossitis (MRG) is a benign uncommon usually asymptomatic condition of tongue superimposed by secondary infection usually by candida. It is characterized by central papillary atrophy of dorsal surface of tongue particularly anterior to the circumvallate papillae.[1] It predominantly affects males[2] while few studies showed female preponderance[3,4] The etiopathogeness of MRG is uncertain but it was once attributed to an embryologic fault caused by failure of tuberculum impar to unite completely with lateral processes of the tongue which results in area of smooth, erythematous oral mucosa on posterior dorsal surface of tongue with scarcity of papillae.[5] Most of the researchers nowadays do not endorse this theory. A recent development revealed that posterior dorsal surface of tongue is the main reservoir of candidal microorganisms in oral cavity. However, there are some local factors which include trauma or surface variation in the anatomy which may allow candidal hyphae to proliferate leading to the development of MRG[6,5] Studies has shown diverse predisposing factors associated with median rhomboid glossitis such as denture wearing, smoking, diabetes mellitus[7,8] The most widely accepted theory is that candidal infections play an important role in etiology.[9]

The aim of this case report is to determine the clinical presentation, etiological factors and its effects on tongue and associated oral structures.

Case Report:

A 38-old female visited to Out Patient department of Bahria University Dental Hospital for routine dental checkup. Clinical examination of mouth revealed a well demarcated rhomboid area of depapillation on the dorsal surface of tongue just anterior to circumvallate papillae. The surface was smooth and raised, the palatal mucosa was normal. On further inquiry, there were no any associated complaints.

She noticed a red patch on her tongue six months ago, which was asymptomatic. She did not seek any medical advice. Her medical history was unremarkable. A working clinical diagnosis of 'median rhomboid glossitis' was made.

Due to its asymptomatic nature, no treatment was advised. She was reassured and regular monitoring recommended after three to six months.

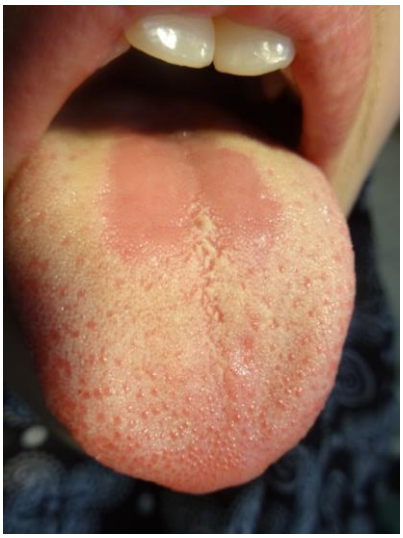

Figure 1: A 38 old female patient showing MRG on the dorsal surface of tongue

DISCUSSION:

There are variety of tongue lesions which are health concern for both clinicians and patients. Therefore, it is mandatory for the dentist to become aware of these conditions and their etiology, clinical features, diagnosis, and management.

MRG is perceived as manifestation of chronic candidiasis and it was described first by Brocq in 1914.[1] The prevalence of MRG varies around the world. Yarom conducted study among adult Israeli Jewish population showed the prevalence rate was 2.4%.[10] while an Iranian study showed 6.43% in diabetic patients.[11] The prevalence of MRG among Jordanian and Malaysian subjects was found to be 0.5%[12] and 0.2% respectively.[13] Espinoza study in Brazilian aging Chileans revealed 0.9% prevalence of MRG.[14] So far, no data is published in Pakistan regarding the prevalence of MRG at national level. Literatures have shown that MRG is very rare among children, but Robert's study on Minnesota school children demonstrated 0.14% prevalence. MRG is usually asymptomatic but in some situation, may cause burning sensation which is associated with food condiments which may warrant the patient to seek medical assistance. [15]

The exact etiology of MRG is controversial. Several factors have been proposed as possible causes such as denture wearing, smoking, diabetes mellitus, use of corticosteroids sprays or inhalers and human immunodeficiency virus (HIV).[16] Most of researchers have now agreed that MRG is a variant of the oral lesion associated with candida infections. Ghabanchi conducted study on Iranian diabetics (Type 1 and II) patients showed increased prevalence of MRG than that of control group.[11]Deshpande conducted a study showing a unique case of MRG infested with heavy colonies of actinomycosis in a sixty-year-old man.[17]

CONCLUSION:

Previous researchers have shown a strong association of systemic diseases and presence of MRG. The author is of opinion that other local and

systemic risk factors must be explored to identify those factors and prevent the onset of disease.

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