

Original Article

Assessment of Recurrent Aphthous Ulcers in Study Population

Shivakumar B.N.¹, Poornima.K², C.J.Muruges³, Srinivasa.M⁴

¹Professor & HOD, ³Senior lecturer, Department of Oral Pathology, ⁴Senior lecturer, Dept of conservative dentistry and Endodontics, Sharavathi Dental College, Shimoga, Karnataka, India, ²Associate Professor, Department of Public Health Dentistry, Govt. Dental College, Bellary, Karnataka, India

ABSTRACT:

Background: Recurrent aphthous stomatitis (RAS) is a type of recurrent ulcer where it heals and reappears after a period of time. The present study was conducted to assess the cases of RAS in study population. **Materials & Methods:** The present study was conducted on 340 patients with RAS of both genders. General information such as name, age, gender, location of occurrence of ulcers etc. was recorded. **Results:** Out of 340 patients, males were 210 and females were 130. The difference was non-significant ($P > 0.05$). Age group 10-19 years had 50 males and 38 females, 20-29 years had 86 males and 64 females, 30-39 years had 46 males and 18 females, 40-49 years had 28 males and 10 females. The difference was significant ($P < 0.05$). Common site was buccal mucosa in males (120) and females (50), labial mucosa in males (60) and females (40) and tongue (30) and tongue (40). The difference was significant ($P < 0.05$). **Conclusion:** RAS is a common condition among young adults. Common site of occurrence is buccal mucosa, labial mucosa and tongue. Nutritional deficiency, stress etc. have been cited as etiological factors.

Key words: Buccal mucosa, Labial mucosa, Ulcer.

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Corresponding Author: Dr. Shivakumar B.N., Professor & HOD, Department of Oral Pathology, Sharavathi Dental College, Shimoga, Karnataka, India

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INTRODUCTION

Recurrent aphthous stomatitis (RAS) is a type of recurrent ulcer where it heals and reappears after a period of time. The term "aphthae" was first used by Hippocrates and later described by Miculicz and Kummel¹ as "Miculicz's aphthae." The accepted classification of aphthae is based on the three parameters of lesions such as size, duration, and the presence of residual scarring. RAS is classified on the basis of ulcer size into major, minor, or herpetiform. Minor aphthous ulcers are small (<1 cm in diameter), well defined, shallow, and heal within 2 weeks without scars. Major ulcers are bigger, deeper, and take up to 6 weeks to heal, leaving a scar behind. Herpetiform ulceration is characterized by multiple, small (3-6 mm), shallow ulcers which take weeks to heal. RAS is also called "canker sores," and the previous terminology of "Miculicz's aphthae" is now recognized as minor aphthous ulcers whereas the old terminology of Sutton's aphthae or periadenitis mucosa necrotica recurrens is now recognized as major aphthous ulcers.²

RAS is capable of causing severely painful and may interfere with eating, speaking, and swallowing. Predilection sites include the ventral surface of the tongue, floor of the mouth, and buccal, labial, soft palatal, and oropharyngeal mucosa. Thus, RAS can result in significant morbidity and quality of life. Although RAS is the most common disease affecting the oral mucosa, the etiology and pathogenesis of RAS remain unknown. Previous study found that some factors of RAU, such as local, trauma, microbial, systemic, nutritional, immunological, and genetic factors.³ The present study was conducted to assess the cases of RAS in study population.

MATERIALS & METHODS

The present study was conducted on 340 patients with RAS of both genders. All were informed regarding the study and written consent was obtained. Ethical clearance was obtained before the study. General information such as name, age, gender, location of occurrence of ulcers etc. was recorded. Results thus

obtained were subjected to statistical analysis using chi-square test. P value less than 0.05 was considered significant.

RESULTS

Table I Distribution of patients

Total- 340		
Males	Females	P value
210	130	0.5

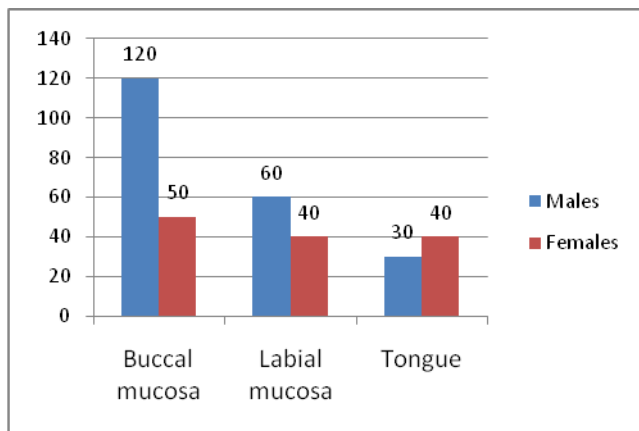
Table I shows that out of 340 patients, males were 210 and females were 130. The difference was non- significant (P> 0.05).

Table II Age wise distribution of patients

Age group (years)	Males	Females	P value
10-19	50	38	0.01
20-29	86	64	
30-39	46	18	
40-49	28	10	
Total	210	130	

Table I shows that age group 10-19 years had 50 males and 38 females, 20-29 years had 86 males and 64 females, 30-39 years had 46 males and 18 females, 40-49 years had 28 males and 10 females. The difference was significant (P< 0.05).

Graph I Location of ulcers in patients



Graph I shows that common site was buccal mucosa in males (120) and females (50), labial mucosa in males (60) and females (40) and tongue (30) and tongue (40). The difference was significant (P< 0.05).

DISCUSSION

Recurrent aphthous ulcers represent a very common but poorly understood mucosal disorder, which occur in men and women of all ages, races and geographic regions. Oral

ulcer causes a lot of suffering and agony for the patients throughout the life. RAS is the most common inflammatory ulcerative condition of the oral mucosa, with a high prevalence among women. A diagnosis of RAS depends mainly on history and clinical examination.⁴ It occurs in the nonkeratinized areas such as lips, tongue, buccal mucosa, and soft palate. They are usually painful, shallow, round ulcers with an erythematous halo covered by a yellowish-gray fibro membranous layer. Patients with mild recurrent aphthous ulceration usually do not require any treatment for the lesion.⁵

In present study, out of 340 patients, males were 210 and females were 130. We found that age group 10-19 years had 50 males and 38 females, 20-29 years had 86 males and 64 females, 30-39 years had 46 males and 18 females, 40-49 years had 28 males and 10 females. This is in agreement with Wardhana et al.⁶

In a study by Yojari et al⁷, a total of 71,851 patients within the age group between 10 and 70 years were screened for a period of 5 years in western population of Maharashtra. The frequency and distribution of RAS in gender, age, and site were calculated. Out of 71,851 patients, only 72 patients were clinically diagnosed to be suffering from RAS. The prevalence of RAS was 0.1%. There was a higher prevalence in females as compared to males and it was most common in the second and third decades of life, with buccal mucosa as the predominant site followed by labial mucosa and tongue.

We found that common site was buccal mucosa in males (120) and females (50), labial mucosa in males (60) and females (40) and tongue (30) and tongue (40). This is in agreement with Jurge et al. Scully C⁸ found that recurrent aphthous ulceration (RAU) is a common oral mucosal disease. The etiological involves in genetics, vitamin deficiencies, trauma, immune dysfunction and stress. This study was to explore the related risk factors of recurrent aphthous ulceration (RAU) among college students, and provide basis for further research. The overall prevalence of RAU was 23.30% among college students (23.23% in male and 23.39% in female). There are statistical significance in prevalence of RAU between subjects with RAU and without RAU (P<0.05) the prevalence of RAU in different grade, age, adequate brushing time, good brushing habits, wear dentures or braces, other oral disease, eat barbecue, adequate exercise time is statistic difference.

CONCLUSION

RAS is a common condition among young adults. Common site of occurrence is buccal mucosa, labia mucosa and tongue. Nutritional deficiency, stress etc. have been cited as etiological factors.

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