

Recurrent aphthous ulcers in relation to some precipitating factors in Baghdad city

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Abstract

This study was designed to investigate the recurrence of aphthous ulcers among three groups of people in different ages, and to evaluate the most effective precipitating factors in developing recurrent aphthous ulcers RAU.

The results of this study showed that the stress, allergy, hormonal disturbances, hematological deficiencies were the most predisposing factors on RAU .About (40-50%) of patients experience recurrences of the ulcers. Data recorded that RAU was more common in females than in males and RAU can begin in childhood, but the peak period for onset is the second decade of life; frequency and severity diminish with age.

Key words: Aphthous ulcers, stress, etiology, precipitating factors.

Introduction

Despite the fact that the recurrent aphthous ulcers RAU are the most common human oral mucosal disease, the cause is poorly understood.

The prevalence among different populations has been documented with aphthous ulcer⁽¹⁾.

Since the etiology of RAU is, indeterminate research has focused upon variety of precipitating factors, they include: stress, nutritional deficiencies, trauma, hormonal changes, diet, and immunological disorders⁽²⁾.

Aphthous ulcers are associated with local pain and discomfort, the ulcers are round to oval, covered by a gray or yellowish fibrinous surface, and surrounded by an erythematous border⁽³⁾.

Aphthous ulcers occur on areas of the mouth in which the mucosa is non keratinized and loosely attached,

particularly the buccal mucosa, labial mucosa, floor of the mouth, ventral surface of the tongue and soft palate, ulcers may appear as single or multiple lesions⁽⁴⁾.

The purpose of this study is to evaluate the most effective predisposing factors on RAU among 3 groups of people in different ages and the frequency of aphthous ulcers recurrences.

Materials and Method

Eighty five patients (36 males and 49 females) aged from 10 up to 39 years old were examined from private clinics in Baghdad city.

A questionnaire case sheet was prepared including age, sex, general health, systemic disease, stress factors, drugs and recurrence of aphthous stomatitis.

The data were collected from the case sheets after the clinical

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examination of the patients.

Age:		
Sex:		
General health:	Yes	No
Systemic disease		
Drugs		
Presence of stress factors		
Recurrence of ulcers		
The questionnaire case sheet		

Results

The sample was comprised of 36 (43.7%) males and 49(56.3%) female; they were divided into (3) age groups as in table (1)

Table (2) showed the predisposing factors of RAU in different age groups, psychology and stress factors were 39 while hematological deficiencies 23 then hormonal disorders 13 finally allergy were 10 patients . Only 21 out of 49 females and 19 of 36 males had recurrence of RAU as appeared in table (3).

Discussion

RAU is a common oral disorder; the etiology of it is not entirely clear, and aphthae are therefore termed idiopathic. In the present study we focused upon a variety of potentiating factors that had been include: stress, nutritional deficiencies, hormonal changes, food allergies ^(5,6).

Epidemiological studies have suggested that emotional stress may be precipitating factor but it is unlikely to be the direct cause of ulceration⁽⁵⁾, and this finding come in agreement with present study. We can explain the relation between stress and RAU to that some patients may release certain types of mucosal condition making it

more subject for developing RAU. And probably emotional stress may be associated with pernicious habits, such as cheek biting, which may precipitate and influence the pattern of ulceration^(7,8).

Hematological abnormalities (deficiencies) associated with iron deficiency occur most frequently with RAU. Deficiencies of foliate and/or vitamin B₁₂ are also associated with aphthous ulcers.

The role of hematological deficiency states that deficiencies of iron foliate or vit.B₁₂ can produce atrophic changes in the oral mucosa. However, the ulceration in some patients improves when the deficiency is corrected, suggesting a causal role^(6,9).

It is observed in this study that there is clear relationship between aphthous ulcers and the menstrual cycle, it has suggested that the degree of cornification of the mucosa is reduced in the low estrogen, premenstrual phase, and that this may render the mucosa more susceptible to trauma which could trigger the ulcers⁽¹⁰⁾.

Allergy may precipitate and influence the site of some ulcers but does not play an essential role in the a etiology of RAU as appeared in this study⁽¹¹⁾.

Although a variety of oral ulcers may recur, but the prevalence varies with the population, as showed in this study, and this is more common in females than males.

It is also noticed that (40-50%) of the patients, characterized by frequent recurrences of aphthous ulcers over a number of years.

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Table (1): Distribution of the sample by age and gender

Groups	Age groups (Y)	Male	Female	Total
Group 1	10-19	18	27	45
Group 2	20-29	11	14	25
Group 3	30-39	7	8	15

Table (2): Aphthous ulceration in relation to predisposing factors in different groups

Predisposing factors	Group 1		Group 2		Group 3	
	Male	Female	Male	Female	Male	Female
Psychology and stress	8	13	6	7	3	2
Food allergy	2	3	2	1	1	1
Hematological deficiency	7	6	3	2	3	2
Hormonal disorders	1	5	-	4	-	3

Table (3): Recurrence of aphthous ulceration by gender and groups

Groups	1 st time appearance of ulcer		Recurrent appearance of ulcer	
	Male	Female	Male	Female
Group 1	8	16	10	11
Group 2	5	7	6	7
Group 3	4	5	3	3