www.ThePharmaJournal.com

The Pharma Innovation

ISSN (E): 2277- 7695
ISSN (P): 2349-8242
NAAS Rating 2017: 5.03
TPI 2017; 6(7): 908-910

www.thepharmajournal.com
Received: 28-05-2017
Accepted: 29-06-2017

Dr. Md. Asad Iqubal
Senior Lecturer, Department of Oral Medicine and Radiology, Patna Dental College and Hospital, Patna, Bihar, India.

Dr. Naushad Anwar
Tutor, Department of Oral Medicine and Radiology, Patna Dental College and Hospital, Patna, Bihar, India.

Dr. Mobeen Khan
Senior lecturer, Department of Oral Medicine and Radiology, Chandra Dental College and Hospital Barabanki, Uttar Pradesh, India.

Dr. Chandra Prakash Gupta
MDS, Department of Orthodontics, Chandra Dental College and Hospital Barabanki, Uttar Pradesh, India.

Dr. Hanjala Shafi Rayeen
Post Graduate Student, Department of Oral pathology and Microbiology, Chandra Dental College and Hospital Barabanki, Uttar Pradesh, India.

Dr. Divyanshu Shrivastava
Post Graduate Student, Department of Pedodontics and Preventive Dentistry, Chandra Dental College and Hospital Barabanki, Uttar Pradesh, India.

Correspondence
Dr. Mobeen Khan
Senior lecturer, Department of Oral Medicine and Radiology, Chandra Dental College and Hospital Barabanki, Uttar Pradesh, India

Recurrent aphthous stomatitis: A case report

Dr. Md. Asad Iqubal, Dr. Naushad Anwar, Dr. Mobeen Khan, Dr. Chandra Prakash Gupta, Dr. Hanjala Shafi Rayeen and Dr. Divyanshu Shrivastava

Abstract
Recurrent aphthous stomatitis (RAS) or recurrent aphthous an ulcer (RAU) is a common disorder affecting 5% to 66% of examined adult patient groups. There may be a female predominance in some adult and child patient. We report a case of a 30-year old male patient presented a 2-year history of episodes of multiple recurrent ulcers on the ventral surface of anterior part of tongue. Topical application of Triamcinolone acetonide 0.1%, topical lignocaine and systemic vitamin B-complex, caused an improvement of pain, discomfort and healing of the aphthous ulcer. No side effects were recorded.

Keywords: Aphthae; Prednisolone; Mouth wash; Steroids; Multivitamins

1. Introduction
Aphthae are common oral lesions that affect approximately 10% to 20% of the population. The etiology of aphthous stomatitis is unknown but according to increasing evidence, its development has an immunogenic process that causes the ulceration of the involved oral mucosa [1, 2]
Similar-appearing lesions may arise in following systemic disorders:

- Behcet's disease [3-5]
- Sweet's syndrome [6]
- Cyclic neutropenia [7]
- Benign familial neutropenia [8]
- MAGIC syndrome [9]
- A periodic syndrome with fever and pharyngitis [10]
- Various nutritional deficiencies with or without underlying gastrointestinal disorders [11]

Several studies from the UK, United States, and Spain have demonstrated that hematinic deficiency (iron, folic acid, or vitamin B12) are twice as common in RAS patients than in controls [12, 13]
Recurrent Aphthous Ulcers (RAU) are usually classified into three different types: minor, major and herptiform RAU:

Case Report
A 30 year old male patient presented a 2-year history of episodes of multiple minor recurrent ulcers on the anterior ventral surface of the tongue. Patient had difficulty in eating and in speech. Clinical examination revealed multiple symptomatic ulcers with a perilesional erythematous halo covered with a pseudomembrane. The size of ulcers was less than 10 mm in diameter (Figure 1). The ulcers were not associated with any type of discharge. The ulcers were tender on palpation. The medical history and the family history were non-contributory. A clinical diagnosis of minor aphthous ulcers was made on the basis of the history and the clinical examinations.
The patient was subjected to a therapeutic regimen consisting of daily topical application of Triamcinolone acetonide 0.1%, topical lignocaine and systemic vitamin B-complex, caused an improvement of pain, discomfort and healing of the aphthous ulcer. Patient was advised to apply the topical lignocaine 4 times in a day half hour before meal and Triamcinolone acetonide 0.1% half hour after meal on the affected area. Patient was also advised to take vitamin B-complex once in a day. These medicines were advised for 7 days. Diet modification was also done. Patient was advised to take green vegetables and non-spicy food. Patient was recalled after 7 days for follow-up and reported complete relief of pain and there was no discomfort.

The ulcers were completely healed without scar formation (Fig: 2). No side effects were recorded.

S. No.	Clinical Features	Minor RAU	Major RAU	Herptiform RAU
1	Age	Childhood	Puberty	After puberty
2	Gender	M=F	M=F	F>M
3	Sites	Labial mucosa, Buccal mucosa, floor of mouth	Labial mucosa, soft palate and fauces	Labial mucosa, buccal mucosa, lingual mucosa, palatal mucosa, gingival mucosa, floor of the mouth, pharynx
4	Size (mm)	<10	>10	1-2 Can be larger in case of fusion of ulcer
5	Number	1-5	1-10	10-100
6	Duration (days)	4-14	>30	<30
7	Rate of Recurrence (months)	1-4	<monthly	<monthly
8	Permanent scarring	Uncommon	Common	Uncommon

Fig 1: Multiple minor ulcers present on the anterior ventral surface of tongue.

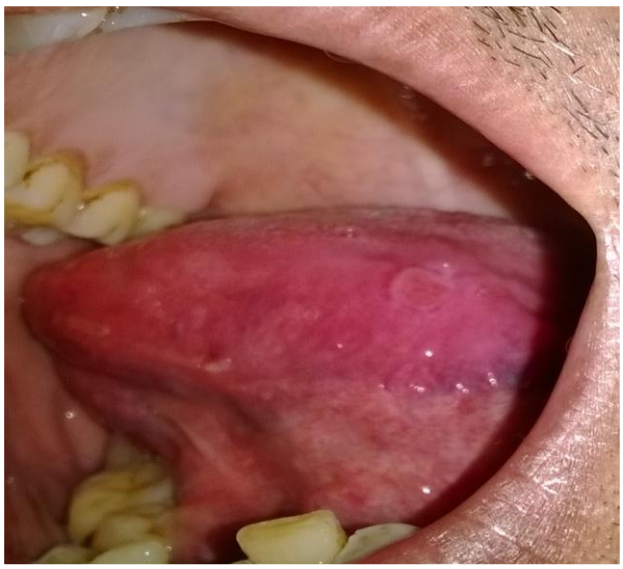

Fig 2: Complete healing of the ulcers after 7 days.

Discussion

Because of its uncertain etiology and various clinical presentations, aphthous stomatitis remains a challenge for the oral and maxillofacial health care professionals.

Most patients with RAU need no treatment because of the mild nature of the disease. Some manage with maintenance of good oral hygiene, the right kind of toothpaste (without irritating sodium lauryl sulfate, e.g. Biotene) [14] and occasional palliative therapy for pain. Following medication are used for the management of RAU:

Mouthrinses	Chlorhexidine gluconate, Benzydamine hydrochloride, Betadine
Topical corticosteroids	Hydrocortisone hemisuccinate, Triamcinolone acetonide, Flucinonide, Betamethasone valerate, Betamethasone-17-benzoate, Flumethasone pivolate, Beclomethasone dipropionate,
Antibiotics	Topical tetracyclines
Immunomodulators	Levamisole, Colchicine, Gammaglobulins, Azathioprine, Dapsone, Thalidomide, Pentoxifylline, Prednisolone, Azelastine, Cyclosporine, Amlexonox,
Others	Systemic zinc sulphate, Sodium cromoglycate, Deglycyrrhizinated licorace, Low-energy laser

Haematologic work-up should be done including complete blood count, serum ferritin, folate and B-vitamin levels. In the case of deficiencies practitioners should start replacement therapies and/or make appropriate referrals [14].

Topical agents are the first choice of treatment for RAU. They are cheap, effective and safe. The Anti-microbial mouthwash use in RAU is intended to control microbial contamination and secondary infection. Tetracycline, an antibiotic mouthwash reduces ulcer size, duration and pain because of its ability to reduce not only secondary infection but also to inhibit collagenase activity [15].

Topical medications are easily washed away from the target area. This problem can be addressed by using different kinds of adhesive vehicles[16] in combination with the drug. For example, strong topical corticosteroids when compounded with mucosal adherents are effective despite limited contact time. [14] Topical glucocorticoids that have demostrated efficacy for RAU are fluocinonide, triamcinolone and clobetaso [17].

Conclusions

Recurrent aphthous stomatitis (RAS) or recurrent aphthous ulcers (RAU) remains a common oral mucosal disorder in most communities of the world. Proper systemic evaluation is important before prescribing the medication.

Acknowledgement

Authors acknowledge the immense help received from the

scholars whose articles are cited and included in reference of this manuscript. The authors are grateful to authors / editors / publishers of all those articles, journal and books from where the literature for this article has been reviewed and discussed.

References

1. Burgess JA, Johnson BD, Sommers E. Pharmacological management of recurrent oral mucosal ulceration. Drugs 1990; 39:54-65
2. Gombos F, Serpico R. Immunopatologia Orale. Piccin, Padova (Italy), 1999.
3. International Study Group for Behcet's Disease. Criteria for diagnosis of Behcet's disease. Lancet 1990; 335:1078-80.
4. Krause I, Rosen Y, Kaplan I. Recurrent aphthous stomatitis in Behcet's disease: Clinical features and correlation with systemic disease expression and severity. J Oral Pathol Med. 1999; 28:193-6.
5. Krause I, Uziel Y, Guedj D. Mode of presentation and multisystem involvement in Behcet's disease: The influence of sex and age of disease onset. J Rheumatol. 1998; 25:1566-9.
6. Driban NE, Alvarez MA. Oral manifestations of Sweet's syndrome. Dermatologica 1984; 169:102-3.
7. Scully C, MacFadyen EE, Campbell A. Orofacial manifestations in cyclic neutropenia. Br J Oral Surg. 1982; 20:96-101.
8. Hasturk H, Tezcan I, Yel L. A case of chronic severe neutropenia: Oral findings and consequences of shortterm granulocyte colony-stimulating factor treatment. Aust Dent J. 1998; 43:9-13.
9. Le Thi Huong D, Wechsler B, Piette JC. Aortic insufficiency and recurrent valve prosthesis dehiscence in MAGIC syndrome. J Rheumatol. 1993; 20:397-8.
10. Marshall GS, Edwards KM, Butler J. Syndrome of periodic fever, pharyngitis and aphthous stomatitis. J Pediatr. 1987; 110:43-6.
11. Eversole LR. Immunopathology of oral mucosal ulcerative desquamative, and bullous diseases. Oral Surg Oral Med Oral Pathol. 1994; 77:555-71.
12. Wray D, Ferguson MM, Mason DK. Recurrent aphthae: Treatment with vitamin B12, folic acid and iron. Br Med J. 1975; 2:490-3.
13. Tyldesley WR. Stomatitis and recurrent oral ulceration: Is a full blood screen necessary? Br J Oral Surg. 1983; 21:27-30.
14. CASIGLIA JM. Recurrent aphthous stomatitis: Etiology, diagnosis and treatment. Gen Dent. 2002; 50:157-166.
15. Ship Ja, Ahwvej Em, Doerr Pa, Henson Bs, Sarmadi M. Recurrent aphthous stomatitis. Quintessence Int 2002; 31:95-112.
16. Ylikontiola L, Sorsa T, Hayrinenimkonen R, Salo T. Doxymycinecyanoacrylate treatment of recurrent aphthous ulcers. Oral Surg Oral Med Oral Pathol Oral Radiol Endod. 1997; 83:329-333.
17. Vincent SD, Lilly GE. Clinical, historic, and therapeutic features of aphthous stomatitis. Oral Surg Oral Med Oral Pathol Oral Radiol Endod. 1992; 74:79-86.