Case Report

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Haemorrheologicals: a new approach in the treatment of recurrent aphthous ulcer

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ABSTRACT

Oral ulcers may have a great many causes. Aphthous stomatitis or Recurrent Aphthous Ulceration (RAU) is an extremely common disorder of the oral cavity. The majority of chronic oral ulcers are accounted for by major aphthous ulcers. The diagnosis of RAU is made on clinical grounds and through exclusion criteria .Here we present a case of RAU treated with a different drug regime.

Keywords: Ulcer, RAU, Haemorrheologicals

INTRODUCTION

Oral ulcers may have a great many causes, although in some no cause is identified. Most ulcers are benign and resolve spontaneously but a small proportion of them are malignant. Trauma, minor aphthous ulcers, drugs, and infections are responsible for most acute, self-limiting oral ulcers. Chemical and thermal trauma can also cause oral ulceration.

Aphthous stomatitis or Recurrent Aphthous Ulceration (RAU) is an extremely common disorder of the oral cavity, estimated to affect 20% of the population, but when specific ethnic or socioeconomic groups are studied, the incidence ranges from 5 to 50%. Minor aphthous ulcers are painful, discrete, and round, measuring less than 1 cm in diameter with a greyish base and a red halo and affects only nonkeratinised mucosa. They typically heal spontaneously within 10 days without scarring, although more severe forms may persist, and recurrence is common.

The majority of chronic oral ulcers are accounted for by major aphthous ulcers, traumatic ulceration with persistent irritation (for example, from a sharp tooth, denture flange, or in rare cases deliberate self-harm), oral lichen planus, drugs, and chronic infections. Major aphthous ulcers tend to be larger than minor ones and can be upto 3cm in diameter and may involve the keratinised oral mucosa such as the hard palate. They can persist for up to 3 months and often heal with scarring. Their clinical appearance may suggest malignancy. Third variety is herpetiform RAU. Pinhead-size ulcers occur in crops. Typically, the ulcers become confluent and healing takes up to 40-50 days.

CASE REPORT

A 52 year old, moderately built and nourished male who is an agriculturist by occupation presented with complains of ulceration in both sides of cheek since 3 months. He had been suffering from recurrent ulcers on either side of the cheek for the past 9 years. The ulcer

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started as small in size each time on either side of the cheek or on one side and increases in size to about 3 cm in diameter and heals within a month with mild amount of scarring. There is no discharge but has associated symptoms like pain while having food and difficulty in chewing food. There is no history of fever or any systemic illness. He underwent medication for the ulcer in different hospitals.

He was treated with prednisolone - 10 mg (twice daily) for 6-8 months, clobetasol 0.05 % - topical app twice daily, triamcinolone acetate topical app twice daily, doxycycline - 100 mg twice daily for 5 days amoxicillin - 500 mg 3 daily for 3 days, rabeprazole - 20 mg once daily for 10 days, antoxid - once daily x 30 days and levamisole - 150 mg once daily x 7 days. He did not have any deleterious habits like smoking or drinking alcohol. No abnormality was detected in review of the systems and general examinations.

A large oval to round ulcer of 4 x 4 cm on each cheek in the 36, 46 region was present. The ulcer was oval to round in shape, erythematous and crossing the midline 1 cm above and below with punched out margins and floor covered with necrotic slough. It was soft in consistency and tender. There was no palpable lymph node. There was no discharge or bleeding and surrounding mucosa was normal. Teeth was missing at 36, 46 region. The rest of the oral cavity was normal. A provisional diagnosis of major recurrent aphthous ulcer in right and left buccal mucosa was made based on history and clinical findings. Granulomatous ulcer - tuberculous, deep fungal ulcer and ulcer associated with systemic disease etc. were considered as differential diagnosis.

Investigation revealed inflammatory cells in cytology smear and a non-specific ulcer as biopsy. Haematological values were slightly altered with RBS increased, due to diabetes which he developed as a complication of steroid therapy. Final diagnosis of recurrent major aphthous ulcer was made and he was treated with inj. crystalline penicillin - 1.2 million units - twice daily for 7 days, inj. gentamycin - 80 mg/2ml - twice daily for 7 days, tab. pentoxyphylline - 400 mg, twice daily for 20 days, multivitamin - once daily for 20 days and betadine mouth wash - 2 %, thrice daily and the prognosis was good.



Figure 1: Ulcer on left buccal mucosa.



Figure 2: Ulcer on right buccal mucosa.



Figure 3: Healing of ulcer in one month - comparison of left and right side.

DISCUSSION

RAS is the most common cause of recurring oral ulcers and is essentially diagnosed by exclusion of other diseases. The diagnosis of RAU is made on clinical grounds. Biopsies are only indicated when it is necessary to exclude other diseases, particularly granulomatous diseases such as Crohn's disease or sarcoidosis. The primary lesions of TB manifest in the oral cavity as non-healing chronic ulcers. A histopathological study is needed to exclude carcinomatous changes and to confirm the diagnosis of TB. The presence of a granulomatous inflammation with Langhan's giant cells and focal caseous necrosis in the histological specimen was typical of TB.

The aetiology of RAU is unknown, though there are strong associations with having a family history of RAU, stress, smoking cessation and haematinic deficiency. RAU is also seen in gastrointestinal disease, particularly Crohn's disease (which may involve the oral mucosa directly or induce oral ulceration secondary to malabsorption), coeliac disease and other disorders of malabsorption, in immunological disorders, Behçet's disease and in infection with the Human Immunodeficiency Virus (HIV). Drug related chronic ulcers may mimic aphthous ulcers (aphthous like

ulceration). The diagnosis of RAU is made on clinical grounds. The current concept is that RAS is a clinical syndrome with several possible causes. The major factors identified include heredity, hematologic deficiencies, and immunologic abnormalities.^{2,3}

Other factors that have been suggested as being etiologic in RAS include trauma, psychological stress, anxiety, and allergy to foods. HIV infected patients, particularly those with CD4 counts below 100/mm³, may develop major aphthous ulcers. 5

In the present case, patient had history of recurrent ulcers, but the present ulcer lasted for a relatively longer time of about 3 months despite being treated with various agents including steroids. The differential diagnosis would include granulomatous ulcer TB, deep fungal ulcer and ulcer associated with systemic disease. In an ulcer due to granulomatous disease, there is no erythematous halo, edges may be undermined and there may be other positive findings and systemic involvement. As the ulcer was non-healing biopsy was done which ruled out all the possibilities of a granulomatous ulcer and fungal ulcer.

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