A Case Report of Major Aphthous Ulcer

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Abstracts: Recurrent aphthous ulceration (RAU) is the most common ulcerative condition following traumatic ulcer that affects the oral cavity. It has three clinical presentations, major, minor and herpitiform aphthous ulceration, all are painful and mostly occur on non-keratinized mucosa. If not secondary infected it will heal spontaneously without leaving scar. Our patient was suffering from recurrent ulcers and one single large ulcer that prevent him from swallowing. Following a comprehensive history and clinical examination, interpreting the clinical findings, the ulcers had been diagnosed as aphthous ulceration (major and minor). An appropriate treatment had been given and the patient had complete recovery

Keywords: Oral Ulcer, Major Aphthous Ulcer, Single Ulcer, Oral Gargle.

1. INTRODUCTION

Recurrent aphthous ulceration is considered as commonest inflammatory ulceration that affect oral mucosa. Clinically, it can be represented in three forms: the minor which is the most common form in which the ulcer is less than 1 centimeter in diameter, surrounded by erythema, well define border, the base is shallow usually on non-keratinized mucosa, it heals within 10-14 days without scar if not inflamed [1]. The second type is the major aphthous ulcer in which equal to or bigger than 1 centimeter in diameter with deeper base usually covered by yellow grayish white membrane heals within 4-6 weeks and may leave scar, it may also occur on keratinized mucosa [2]. The herpetiform aphthous ulcer is very painful, 1-2mm in centimeter, numerous in number, heals without scar formation [2,3.]

Recurrent aphthous ulceration is a multifactorial etiology: genes, nutritional deficiencies, endocrinopathy, infection, trauma, stress, food allergens and smoking cessation were considered as factor have an impact on its development [4]. The ulcerative lesion can occur at any age with no gender or racial predilection [5]. Based on comprehensive history taking and clinical examination, the diagnosis of the aphthous ulcer is done in most of the cases [6]. When the etiological factor identified, the treatment should be directed toward it in addition to the symptomatic treatment, otherwise the lesion is self-cured within 10-14 days in most of the cases [7].

2.CASE PRESENTATION

A Pakistani male aged 43.7 years was admitted to the hospital complaining from sore throat, severe congested throat and sever ulcer with a history of one-month duration mouth ulcer. On history taking, the patient was married, nonsmoker, he has no history of any signs or symptoms of any systemic disease, his vital signs were stable during admission. The diagnosis was acute tonsillitis and stomatitis.

On the second day, the patient was complaining from severe pain and inability of swallowing and even drinking water. Lab investigations Table [1-3] have been done to the patient and showed slight increment in the erythrocyte sedimentation rate (ESR) and high C reactive protein which indicate presence of inflammatory process, mouth swab has been taken and result of smear revealed no change in oral flora. Based on these findings, the patient given injection of Triaxone three times daily, next day, 500 mg of Metrolog injection twice daily in addition to Tantun mouth wash 10 mg twice daily and Daktrin oral gel three times daily plus 1g Perfalgan.

Table 1: Erythrocyte sedimentation rate slightly increased.

LABORATORY REPORT			
TEST	RESULT	UNIT	METHODOLOGY
ESR	16 H	Mm/hr	Modified Westergren

Table 2: Laboratory report showed increased CRP, which is nonspecific inflammatory marker.

LABORATORY REPORT-CLINICAL CHEMISTRY			
TEST	RESULT	UNIT	METHODOLOGY
Glucose -random	99	mg/dl	spectrophotometry
C -reactive protein	30.1	mg/L	immunoturbidometric

Table 3: Normal hematological findings.

LABORATORY REPORT-Complete blood count			
TEST	RESULT	UNIT	METHODOLOGY
Hemoglobin	16.1	g/dl	SLS Hemoglobin method
HCT	49.30	%	Hydrodynamic focusing
RBC count	5.6 H	10*6/UL	Hydrodynamic focusing
MCV	87.8	fL	Calculated
MCH	26.6	pg	Calculated
MCHC	32.5	g/dl	Calculated
RDW-CV	13.4	%	Calculated
Platelet count	149	10*3/uL	Hydrodynamic focusing
MPV	8.3	fL	Calculated
WBC count	5.8	10*3/uL	Flow Cytometry
Leukocyte differential			

Upon consultation of oral medicine specialist, an extra-oral examination was done which revealed absence of abnormal findings in the orofacial area and the skin, with no lymph node enlargement. The patient mentioned that he had history of oral ulceration before, which cure by itself within less than two weeks. The vermillion was dry, ulcerated, cracked and bleeding on wide opening of the mouth as in figure.1.

Figure 1: Lower lip dryness and ulceration.

On intraoral examination, generalized brown racial pigmentation, generalized attrition of all teeth specially on lower anterior teeth as seen in figure 2, the patient had poor oral hygiene with halitosis, edematous gingiva hypertrophy of interdental papilla, accumulation of plaque and calculus as shown in figure 3, multiple carious teeth as in figure 4, presence of two ulcers less than 1 centimeter in diameter on the left side mucosa of the soft palate which are well circumscribed with erythematous base as seen in figure 5, the patient gave history of the same type of ulcer on the tip of the tongue. A large size, deep ulcer, severely painful, on the oral mucosa near the maxillary tuberosity and distal to the upper third molar at the end of maxillary vestibule which was around 1.3 cm in diameter, its floor is covered with white grayish membrane, with smooth and erythematous margin as in figure 6.

Figure 2: Generalized attrition of teeth, especially lower anterior teeth.

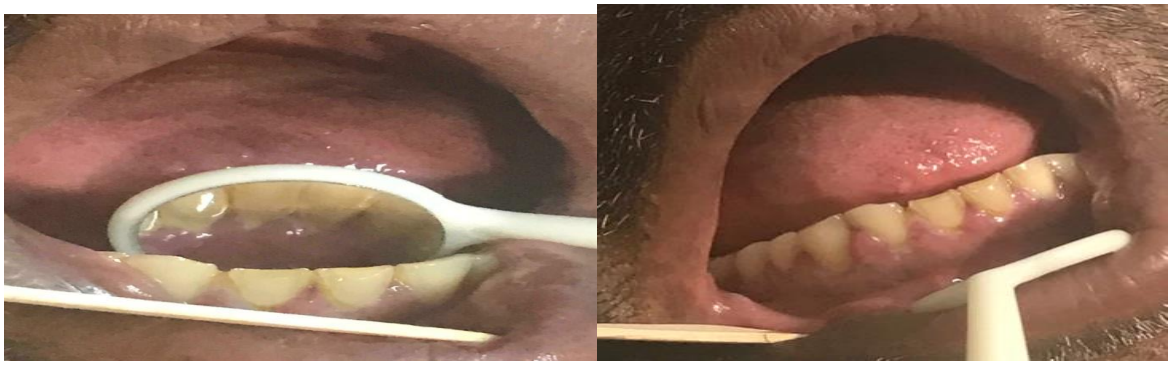

Figure 3: Poor oral hygiene with hypertrophy of interdental papilla and plaque accumulation.

Figure 4: Grose Caries on 15,16.

Figure 5: Two ulcers less than 1 centimeter in diameter on the left side mucosa of the soft palate which are well circumscribed with erythematous base.

Figure 6: A large size deep ulcer on the oral mucosa near the maxillary tuberosity and distal to the upper third molar at the end of maxillary vestibule which was around 1.3 centimeter in diameter.

Upon comprehensive history taking and clinical examination review, a list of differential diagnosis is given as follows: aphthous ulceration, traumatic ulcer, squamous cell carcinoma, pemphigus vulgaris and mucous membrane pemphigoid.

The diagnosis has been given as recurrent aphthous ulceration – minor aphthous ulceration, and the large size ulcer is a major aphthous ulcer. Our treatment plan was counseling of the patient, giving instructions of avoidance of spicy, sour and worm food or drinks. Prednisolone gargle had been prescribed 3 times daily for 1 week, Anginovag aerosol 20 ml 4 times daily after gargle. Follow up after 14 days was done, the patient ulcers were completely cured without scar formation, he can even eat spices and with no complain of swallowing discomfort as shown in figure 7.

Figure 7: 2 Weeks after treatment.

DISCUSSION

Aphthous ulcer is a multi-factorial disease, with variable clinical presentation disease needs no treatment in most of the cases. It is self-limited disease in most of the cases, but if the under lie etiological factor is identified it should be treated which will subsequently resolve the condition and alleviate the pain. As in cases of nutritional deficiencies replacement therapy should be given [8].

Several aggravating factors were recognized for aphthous ulcer. There is a challenge in identifying the exact etiology of aphthous ulcer resulting from histopathological presentation which is nonspecific and the difficulty in identifying the exact cause [9].

The diagnosis of recurrent aphthous ulcer is usually based on comprehensive history taking and clinical examination, taking in consideration a good back ground knowledge to exclude possible causes of similar presentation of other diseases, no specific investigation to diagnose this lesion [10].

The recurrence of the aphthous ulceration cannot be avoided by any treatment, the treatment is for reduction of aphthous severity, duration and symptoms. Instructions to avoid irritation to the ulcer in addition to the use of topical medications are the treatment of choice for most of the aphthous ulcer lesions. The use of topical corticosteroids along with topical anesthetics is the most common effective treatment. The problem of easy washout of the topical agent had been overcome by adding adhesive material to the effective medication. In some cases, systemic corticosteroids (prednisolone), injection of triamcinolone intra-lesion, the use of thalidomide immune-modulator can be the treatment choice specially in deep large and long lasting major aphthous ulcer [11,12].

CONCLUSION

Aphthous ulcer is a recurrent, painful, self-limited with various clinical presentation and causes. Proper diagnosis and management by elimination of the possible causes, following instructions, although, in some cases there is a need for topical or and systemic treatment.

CONFLICT OF INTEREST

The author declares no conflict of interest.

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DOI: https://doi.org/10.15379/ijmst.v10i2.3124