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Case Report

Recurrent Aphthous Stomatitis: A Case Report

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ABSTRACT:
Recurrent aphthous stomatitis (RAS) remains the most common ulcerative disease of the oral mucosa, presenting as painful, round shallow ulcers with defined erythematous margin and yellowish gray pseudomembranous center. RAS has a characteristic prodromal burning sensation that lasts from 2-48 hrs before an ulcer appears. It occurs in otherwise healthy individuals and is typically located on the buccal and labia mucosa and tongue. Involvement of the heavily keratinized mucosa of the palate and gingiva is less common. During this initial period, a localized area of erythema develops. Within hours, a small white papule forms, ulcerates and gradually enlarges over the next 48-72 hours. RAS is classified according to clinical characteristics: minor ulcers, major ulcers, and herpetiform ulcers. We here present you two cases on RAS: Female patients of age 42 years and 11 years reported to the hospital with a burning sensation.
Key Words: Canker Sores, Mucosa Oral Ulcer, Periodic Fever Syndrome.

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INTRODUCTION

Aphthous stomatitis is a painful and often recurrent inflammatory process of oral mucosa that can appear secondary to various well-defined processes. Idiopathic recurrent aphthous stomatitis is referred to as recurrent aphthous stomatitis. The differential diagnosis for recurrent aphthous ulcerations is extensive and ranges from idiopathic benign causes to inherited fever syndromes, to connective tissue disease or even inflammatory bowel diseases.[1-2] A thorough history and review of systems can assist the clinician is determining whether it is related to a systemic inflammatory process or truly idiopathic. Management of aphthous stomatitis is challenging. First-line treatment consist of topical medications with use of systematic medications as necessary.[3-4] The best documented factor is heredity. Miller and colleagues studied 1,303 children from 530 families and demonstrated an increased susceptibility to RAS among children of RAS-positive parents. A study by Ship showed that patients with RAS-positive parents had a 90% chance of developing RAS, whereas patients with no RAS-positive parents had a 20% chance of developing the lesions.There have been theories suggesting a link between RAS and a number of other microbial agents, including oral strepto-cocci, Helicobacter pylori, VZV, CMV, and human herpesvirus (HHV)-6 and HHV-7.[5-6]The major factors presently linked to RAS include genetic factors, hematologic or immunologic abnormalities, and local factors, such as trauma and smoking.

CASE REPORT 1

A 42-year-old female reported to the hospital with a chief complaint of painful ulcerations in the mouth for 1 day before. It started initially by impingement of a broken tooth and later ruptures the labial mucosa. The patient has a history of rheumatoid arthritis for 1 year and is under medication. The patient even complains of dry mouth. On intraoral examination, on inspection: a solitary papule of size approximately 2×2 mm was seen involving the lower labial mucosa, extending anterio posteriorly 1cm away from the vermillion border and 1cm away from the lower vestibule. Medio laterally in the region of 41. Another papule is present just below with a size of less than

1mm. On palpation: all inspectory findings are confirmed on palpation. The papule is tender, non-indurated, surrounded by an erythematous halo and sloppy edges. Based on history and clinical findings, this case is diagnosed as RAS with lower labial mucosa involvement.

Figure 1: Patient Profile

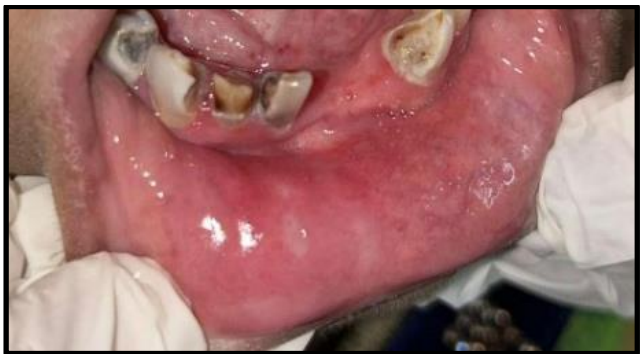

Figure 2:Patient Profile and Papules on Lower Labial Mucosa

CASE REPORT 2

An 11-year-old female reported to the hospital with a chief complaint of painful ulceration in her mouth in the last 3 days. Initially, impinging left buccal mucosa. On intraoral examination, on inspection, a solitary ulcer of size approx. 1x1cm was seen involving left buccal mucosa extending anterio-posteriorly away from the corner of the mouth. On palpation: all inspectory findings are confirmed on palpation. Ulcer is tender non indurated surrounded by an erythematous halo. Based on history and clinical findings, this case is diagnosed as an Aphthous ulcer with involvement of left buccalmuscosa.Differential diagnosis: Recurrent herpetic stomatitis (RHS), Cyclic neutropenia, writers syndrome, Behcet's syndrome.

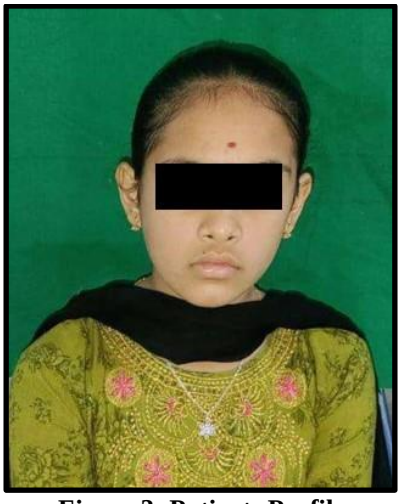

Figure 3: Patients Profile

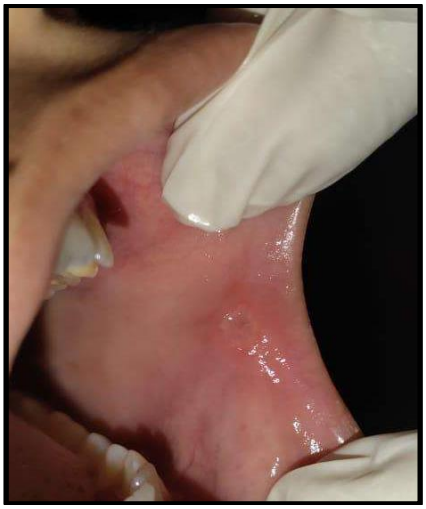

Figure 4:Patients Profile and Ulcer Present on Left Buccal Mucosa

Test Name	Result	Units	Reference Range
	DEPARTMENT OF HAEMATOLOGY		
	COMPLETE BLOOD PICTURE		
Hemoglobin	11.6	gm%	Male : 12.0 – 18.0 gm % Female: 11.0 – 16.0 gm %
RBC count	4.93	mill/cumm	3.5 - 5.5 mill/cumm
PCV	35.8	PERCENTAGE	40-50%
MCV	72.5	FENTO/LITERS	80-100FL
MCH	23.6	PICO/GRAMS	27-32Pg
MCHC	32.5	GRAM/DESI LITERS	32-34g/dl
RDW	14.1	PERCENTAGE	11.6-14.0%
Platelet Count	2.62	Laks /cumm	1.5—4.5Lakh/cumm
Total WBC count	7.86	cumm	4,000 – 11,000/cumm
DIFFERENTIAL COUNT			
Neutrophils	63	%	55 – 70%
Lymphocytes	27	%	25 – 40%
Eosinophils	05	%	01 - 08%
Monocytes	05	%	02 – 06%
Basophils	00	%	00 – 01%

Authorized Signature

Figure 5: Blood Investigations Report of Case 1 Patient

DISCUSSION

Recurrent aphthous ulcerations are common painful mucosa conditions affecting the oral cavity. Despite their high prevalence, etiopathogenesis remains unclear. Aphthosis is a reactive condition. The older patient has had rheumatoid arthritis for the past 1year and is under medication. The patient also has lower conjunctival rim pallor present. The older patient is advised for blood investigation and the younger patient (i.e., case 2) has no systemic illness. Some of the literature shows that there is relation between recurrent aphthous stomatitis and hematinic deficiency particularly iron deficiency anemia.

TREATMENT

Since the RAS has no histopathology and ulcerations are very small. So, we do not require any biopsy, rather complicating the lesions. We can do a simple treatment for this type of lesion. Primary treatment modality states with anti-inflammatory analgesics and antiseptic ointments composed of

- Benzocaine or lidocaine 10-20%
- Choline salicylate 4%
- Xylocaine 2%
- Benzydamine hydrochloride
- Betadine iodine ointment
- Chlorhexidine + metronidazole ointment
- Supportive therapy includes vitamin B12, and zinc can be added in addition to the above other agents for 10-15 days.

In a few resistant cases, we can use triamciloloneacetonide 0.1% (topical steroid) in this type of milder form of case.The cases have been treated with the above-mentioned drugs

CONCLUSION

RAS in severe forms may trouble the patient. However, the rest of the cases are controlled with the above-mentioned medications. In those severe cases and resistant cases, we may need to use other forms of medication. In case the recurrence rate is higher.

Since RAS is autoimmune, this is especially an idiopathic form, and the rest of the forms can occur with predisposing factors like stress, emotion, and immune deficiency. We must add particular minerals to the treatment.

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