

Desquamative Gingivitis: “A diagnostic dilemma”

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ABSTRACT

Desquamative gingivitis is a fairly common disorder, with wide range of causes. It is clinically characterized by erythematous and desquamative involvement of the free and attached gingiva. It may be the initial symptom of the underlying disorder, and patient may report to the general dental practitioner or subject specialist with specific signs and symptoms. The presence of plaque induced gingival inflammation may exacerbate the condition, mask histological features of the underlying disorder, and can lead to delay in diagnosis and misdiagnosis. The present report describes case of desquamative gingivitis and its management.

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Introduction

Desquamative gingivitis is a common disorder, with wide range of causes, most commonly being lichen planus and mucous membrane pemphigoid. Chronic desquamative gingivitis was coined in 1932 by Prinz¹, to describe a peculiar condition characterized by intense erythema, desquamation and ulceration of free and attached gingiva. In 1960, McCarthy et al suggested that desquamative gingivitis is not a specific disease entity, but a gingival response associated with a variety of conditions.² Around 95% of total desquamative gingivitis cases account for lichen planus and cicatrical pemphigoid. Crohn's disease, sarcoidosis, leukemias may also present clinically as desquamative lesion.³ Therefore it is of paramount importance to ascertain identity of disease.

Case report

A 53 year old female patient reported to department of Periodontology with a chief complaint of inability to eat and drink food and burning sensation associated with gums from last two years. Patient gave a medical history of hysterectomy 2 years ago and had a tooth supported metal base fixed prosthesis for maxillary 1st molar and for entire mandibular arch since last 2 years in a private clinic. Intraoral examination revealed bilateral erythematous and diffuse desquamative lesions of the gingiva in maxillary arch. (Fig. 1). The associated teeth had bleeding on probing, and a variable amount of dental biofilm. Haematological findings and random blood sugar were within normal range. Biopsy report confirmed a diagnosis of erosive oral lichen planus. (Fig. 2).



Fig 1. Pre-operative clinical picture showing erosive lesion & Nikolsky sign i.r.t 13, 14.

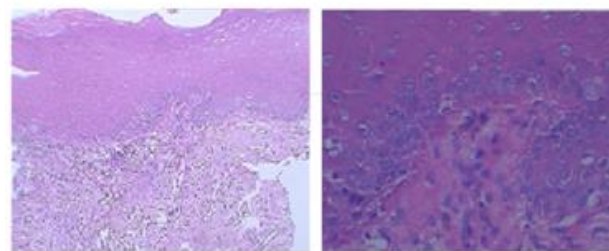


Fig 2. Photomicrograph of Biopsy specimen after Hematoxylin & Eosin staining at (40 X and 10X).

Management of case:

Treatment provided to patient during 1st visit was non-surgical periodontal therapy which included scaling and root planing along with reinforced oral hygiene instructions. Patient was also advised topical application of corticosteroid [betnesol (0.5mg)] over the lesion 3-4 times a day, along with NSAID (Tantum) mouthwash. Alcohol free chlorhexidine mouth wash was also advised twice daily for oral hygiene maintenance. Patient was then recalled after 1 month for further evaluation. On recall visit (after 1 month from initial visit) the lesion was less erythematous but striae had increased. Patient also reported no relief in burning sensation and discomfort was more in mandibular 3rd molar region suspecting to be the aetiology for the discomfort. (Fig-3).



Fig 3. After removal of prosthesis in mandibular arch (after 5.5 months).

Thus patient was advised extraction for 38 and 48 as patient had undergone extraction of opposing contralateral teeth few years back. After 1 week of extraction (1.5 month from initial visit) patient was reassessed and was advised immunomodulators (levamisole) for 1 month seeking immunosuppression as an aetiology due to age and long standing lesion.

After 1 month (i.e. 2.5 months from initial visit) of immunomodulator therapy, patient was reassessed and there was no relief in patient's symptoms. Thus oral hygiene instructions were reinforced and immunomodulators were discontinued.

The suspected aetiology after failure of immunomodulator drugs ruled out to be a parasitic infection, so patient was advised anti-helminthic (Vermisol 150mg) and steroidal (kenacort) ointment application over the lesion for 1 month. On re-evaluation (4 months from initial visit), there was no improvement in lesion and burning sensation. Thorough non-surgical periodontal therapy was repeated for the patient and a topical Dexamethasone oral solution (0.5mg per 5ml) was prescribed to apply twice a day after meals. After 1 week of its use patient got around 70-80% of symptomatic relief but symptoms reappeared after 2 weeks. (5 months from initial visit).

Following the recurrence, the metal base prosthesis was planned to remove. (Fig-4) Endodontic therapy for the abutment teeth followed by prosthetic rehabilitation was done. Patient was asked to continue with dexamethasone oral solution (0.5mg per 5ml) for another 1 month and was kept on regular recall visits.



Fig4. Completely healed lesion (after 8 months).

At 8 month recall visit, patient had symptomatic relief and lesion had healed clinically. (Fig. 5) Patient was further kept on regular recall visits.



Fig 5. Final prosthesis placed in mandibular arch.

Discussion

The gingiva is a target of autoimmune diseases and about 10% of patients with oral lichen planus (OLP) have the disease confined to the gingiva, clinically named

desquamative gingivitis (DG). It can present as reticular, erosive or atrophic subtypes however, the clinical appearance of DG is not pathognomonic and may represent the gingival manifestation of many other autoimmune diseases.⁴

Exacerbations of DG have been associated to periods of psychological stress, anxiety and mechanical trauma.⁵ The presence of gingivitis and periodontitis can complicate the symptoms of DG.⁶ On the other hand, Ramon-Fluixa C, Bagan-Sebastian J, Milian MM, Scully C (1999) suggested in global terms that periodontal status in lichen planus is no worse than that observed among healthy controls therefore, periodontal attachment loss was found to be very similar in lichen planus patients both with and without gingival involvement.⁷

There are various treatments modalities have been documented in the studies with their limitations in terms of recurrence, prevalence and risk for malignant transformation of oral lichen planus.⁸ Anti-inflammatory agents and topical corticosteroids are widely used in the treatment of OLP. Other therapeutic agents that have been investigated are acitretin, retinoids, immunosuppressants such as cyclosporin, azathioprine, mycophenolate, mofetil, tacrolimus and pimecrolimus, thalidomide, interferon alpha, levamisole and phototherapy.⁹ Out of the large number of options available, corticosteroids are most widely used for the treatment. Topical corticosteroids have reported to have any systemic side effects and can be used safely.¹⁰ The different etiological factors responsible for oral lichen planus make its treatment complicated and diffuse in nature with no definitive treatment outcome. In the present case various etiological factors were evaluated at each recall visits and treatment was provided to patient accordingly but no improvement in patient's symptoms was noted for a period of 8 months. No standard treatment regimen is available to treat the lesion permanently; the main dilemma remains with depicting its etiology and to provide appropriate treatment for relieving patient's symptoms.

Conclusion

The patient's diagnosed with desquamative gingivitis should be monitored throughout life. It is not only important to control the symptoms but to treat and relieve patient from signs and symptoms of desquamative gingivitis. In the present scenario the management of desquamative gingivitis can be challenging. Periodic follow-ups should be performed and treatment should be initiated immediately when gingival lesions appear.

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