Innovations

Desquamative gingivitis associated with oral lichen Planus- report of 3 cases.

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***Abstract**:*

Desquamative gingivitis, a widely recognized gingival keratinization disorder known as ulcerated, desquamated, and erythematous gingiva. The aetiology of the disease is still inconclusive with only symptomatic treatment available per se. The most common occurrence is seen along with Oral lichen planus- a mucocutaneous autoimmune disorder that is characterized by reticular or erosive buccal lesions. The following casereports proposethree cases of Chronicdesquamative gingivitis associated with Oral lichen planus. The uniqueness of this case series is the introduction of "SOFT SPLINT" among the multidisciplinary approach for the condition.

Keywords: 1.*Oral lichen planus, 2.desquamative gingivitis, 3.Soft splint, 4.Erythematous gingiva*

Introduction:

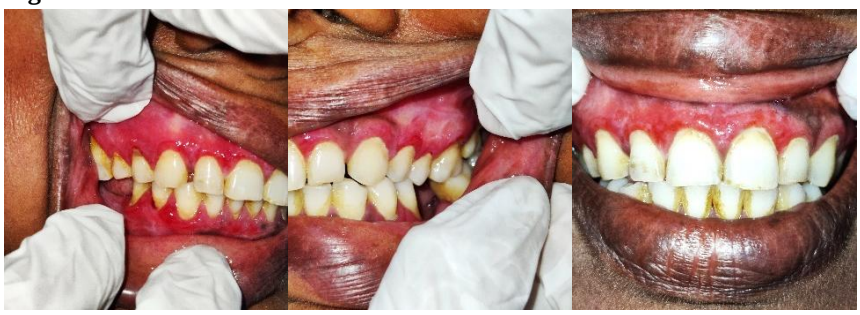
Chronic desquamative gingivitistermed by Prinz in 1932 isan unusual disorder, where the attached and marginal gingivae are erythematous, desquamated, and ulcerated(1). The predisposing factors include ageing, poor oral hygiene, hormonal imbalance, infectious diseases, low immune response, psychological stress, and nutritional deficiencies. Pain, itchiness, burning sensation, andbleeding of the oral mucosa are the most common symptoms which aggravates on eating hot or spicy foods and plaque accumulation (2).The gingival lesions often present as bright red, glossy, even or shrivelled surface (3).It's not a definite disease, but a manifestation of gingival reaction to a range of clinical diseases such as pemphigus, lichen planus, linear IgA diesease, erythema multiforme, systemic lupus erythematosus, pemphigoid.Oral lichen planus(OLP) is the most common disease affecting skin and mucous membrane among the above mentioned conditions (4).Itis an autoimmune disorder distinguished by the skin and oral mucosal lesions.Oral lesions are subclassifiedas reticular, atrophic, bullous, erosive, papular and plaque-like. It manifests as Wickham's striae bilaterally in the buccal mucosa(5).

Case Report - 1

A 48-year-old female patient reported to our college with achief complaint of burning sensation all over the mouth for the past 1 month.On examination, there was presence of white intermingling striae on right and left buccal mucosa. It extended from the commissure of the lips to the molar region. Free and attached gingiva of upper and lower anterior teeth were erythematous with ulceration and bleeding on probing was present.[Figure 1] A provisional diagnosis of reticular lichen planus with desquamative gingivitis was given. Incisional biopsy was done in the right buccal mucosa in the mandibular posterior region. The histopathological report revealed atrophied overlying epithelium with nodular and verrucous proliferation. The connective tissue adjacent to the epithelium shows dispersed lymphocytes suggestive of Oral lichen planus. Basedon clinical and

histopathological findings, afinal diagnosis was given as oral lichen planus with desquamative gingivitis.Complete oral prophylaxis was done and oral hygiene instructions were given on the first visit. The patient was treated with topical steroid therapy (0.1% triamcinolone acetonide paste) to be applied three to four times daily with soft splints fabricated for upper and lower archesalong with multivitamin supplements and chlorhexidine mouth wash.[Figure 2] On the second visit after 2 weeks, a post-therapy assessment was done which showed a significant reduction in the erythema and symptoms of the patient. [Figure 3]

Figure 1: Case 1 Pre-OP



Case Report – 2

A 39-year-old female patient reported with achief complaint of pain in the gums in the lower front tooth region for the past 2 months. The burning sensation aggravated on consuming hot, spicy food. History revealed insomnia and psychological stress for the past 6 months. No contributory medical history and deleterious habits. On intraoral examination, the marginal and attached gingiva of all teeth appeared severely erythematous.[Figure 4] White lesions were present in the left and right buccal mucosa with reticular radiating striae extending from 34 to 37 and 43 to 46. Incisional biopsy was done under LA. The histopathology revealed a typical band of inflammatory cell infiltrate comprising lymphocytes in the subepithelial region suggestive of oral lichen planus. Final diagnosis was made as oral lichen planus with Desquamative gingivitis. The patient was prescribed 0.1% triamcinolone acetonide ointment thrice daily to be placed on the splint fabricated for 15 minutes along with vitamin supplements and chlorhexidine mouth wash. There was satisfactory healing after three weeks. [Figure 5]

Figure 2: Splint Fabrication

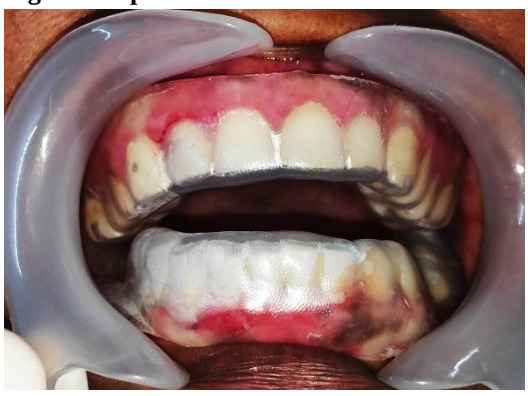
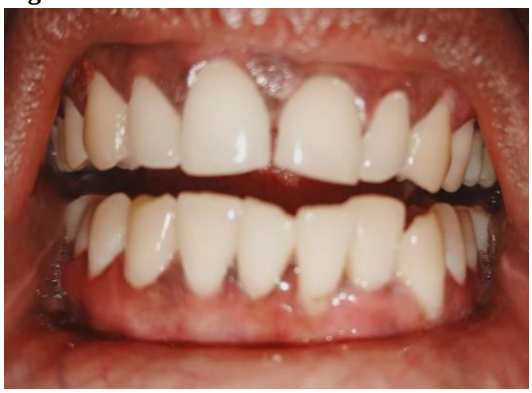


Figure 4: Case 2 Pre-OP

Figure 5: Case 2 Post-OP

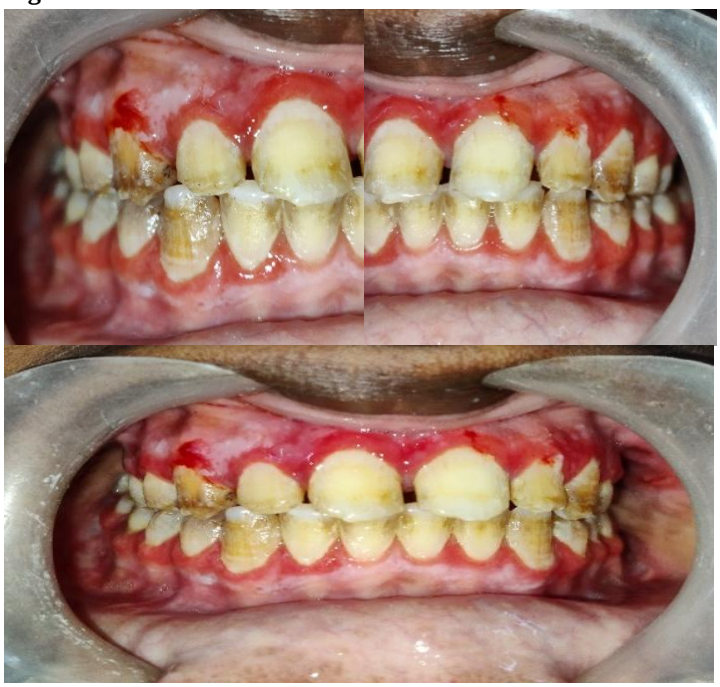


Case Report 3

A 47-year-old female patient reportedwith a complaint of burning sensation and bleeding gums for the past 2 weeks. It aggravated on eating hot, spicy food. Intraoral examination showed generalized erythematous gingiva on the labial aspect of all teeth. Whitish intermingling lines were seen on the gingival lesions. [Figure 6]Similar pattern was also observed in the buccal mucosa on both sides and vestibular region. After giving a provisional diagnosis of erosive lichen planus with desquamative gingivitis, an incisional biopsy of the left posterior buccal mucosa was made. The histopathology was suggestive of oral lichen planus. The patient was treated in a similar way like other two cases but unfortunately she could not report back to follow up appointments but mentioned significant reduction in symptoms when contacted.

Figure 3: Case 1 Post-OP

Figure 7: Case 3 Pre-OP



Discussion:

The prevalence of OLP isfound to be high among women above 40 years of age specifically in non Asian countries (6).According to Fabiana MC,desquamative gingivitis is described as clinical changes of marginal and attached gingivaeither focal or multifocal, confined to the vestibular areawith afiery red color andgrey colored opaque plaques. The surfaceepithelium gets detached if swabbed and reveals a painful, bleeding connective tissue. The oral mucosa is sensitive to thermal changes causing burning sensation(7).Similar symptoms were reported by our patients.In a study conducted to diagnose gingival lesions,approximately 7.4% patients out of 48% had OLP lesions confined to the gingiva. The symptoms usually varies from mild irritation in keratotic forms to severe excruciatingpain in erosive forms(8). Epithelial desquamation and inflammatory changesimpose a problem in obtaining biopsy of the lesion (9). Hence in our cases, biopsy was taken from buccal lesions. The effectiveness of the topical steroid treatment is reduced due to the limitations posed by posture of the tongue and salivary volume. Study reports showed that for a patient with DG associated with lichen planus, maxillary and mandibular drug delivery trays increased potency of drug at local level. Crushed 10mg Prednisolone tablet mixed with saline wasplaced on the borders of the trays and kept in mouth steadily for 20 minutes. A week later reduction in erythema and burning sensation was decreased by half (10). In our cases,topical steroidointment was prescribed with a soft splint(night guards) fabricated for upper and lower arches for 2 weeks. The patient reported back to us with a significant reduction in the inflammation, and erythema of the gingiva. The burning sensation had also reduced. It's significant to mention that in one of the above mentioned cases, the topical steroids ointment in the past did not work for the patient but showed significant effect when applied using splint due to prolonged duration of contact with the tissue.

Conclusion:

Oral lichen planus is an autoimmune mucocutaneous disorder with severe gingival involvement. Proper diagnosis and treatment planning is of utmost importance. A multidisciplinary approach must be followed to ensure the proper oraland wellness of the patient. Patients must be made aware of the consequences of the condition. Psychological counselling can be given if necessary. The integrated approach of topical steroid therapy, along with oral prophylaxis and stress management has been the key factor to the treatment of this detrimental condition and has been mentioned in our report. Our case series showed the successful management of the DG lesions using topical steroid splint therapy.

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