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RESEARCH ARTICLE

TONGUE LICHEN PLANUS: ACASE REPORT.

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Abstract

Lichen planus is a chronic inflammatory disease ,T cell-mediated immune response of unknown origin leads tobasal cell apoptosis, may triggered by stress, genetics and infection. It has various clinical presentations orally and the oral lesion may present with skin lesion. Only the reticular type is asymptomatic, others were present with pain, discomfort and burning sensation. The diagnosis should be confirmed with histo-pathologic findings of the disease,the most effective treatment is hydrocortione, the dose and type depend on the case.

Introduction:-

Lichen planus is a muco - cutaneous disease that affects skin, nails and oral mucosa, scalp and genitalia. It is T cell-mediated immune response of unknown origin. It may be found with other diseases of altered immunity, such asalopecia areata, ulcerative colitis etc.

Oral lichen planus (OLP) is recognized as a chronic, noninfectious, T-cell-mediated inflammatory condition that could be accompanied by skin lesions. It has various clinical presentations orallythe atrophictype, ulcerative, erosive, plaque, reticular annular, that makes the clinical diagnosis un certin that should be confirmed by biopsy and histopathology.

A number of triggers to OLP had been reported, mainly local and systemic triggers for type 2 –cell mediated hypersensitivity, viral infections, stress and autoimmune response to epithelial antigens [1,2].

Case report:-

A 39years Indian male attend the ENT clinic complaining from 4 months duration of pain and discomfort in the left lateral posterior side of the tongue. On history taking, the patient was nonsmoker, have no habit of chowing snuff or anything else. The patient discover the lesion accidently during brushing 4 months ago with no bleeding. The medical history of the patient is good.

The medication history: patient had been on the following medications for last 3 months that prescribed by a doctor to treat the lesion: Cefpodoxine, Supradyn, Ameprex, Duracan-Fucanazole, Fasigyn-Tinidazole, Ranitidine and local anesthesia jelly that cause slight relieve to the patient.

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On extra oral examination, no any abnormality or lymph node enlargement was noticed. Comprehensive intra oral examination revealspoor oral hygiene with calculus and periodontitis figure[1].Fordyce granules seen in buccal mucosa figure [2] .The tongue showed normal size and movement and normal coating figure [3], the lesion is of 3 centimeter length and widthlocated on the left lateral posterior surface of the tongue , it's a mixture of white and red color, the white area not scraped off with tongue blade and the red is without bleeding .On palpation ,the lesion was irregular surface with hard elevated white area which was asymptomatic, red part is tender on palpation figure[4].

Figure 1:- poor oral hygiene with calculus.

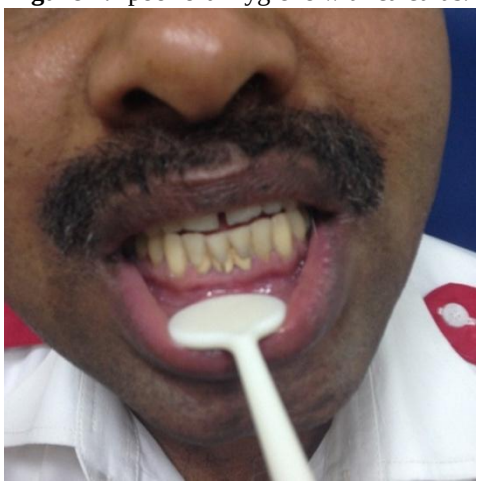


Figure 2:-Fordyce granules seen in buccalmucosa.

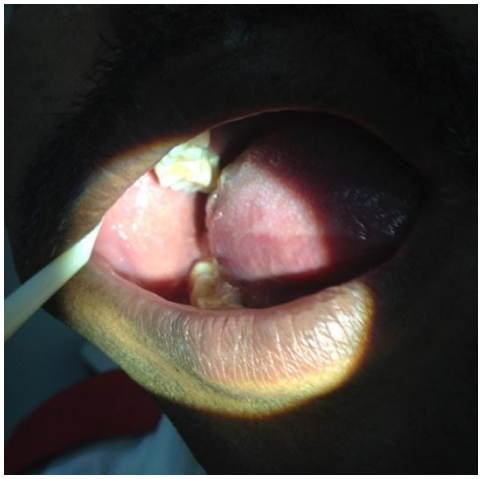


Figure 3:-The tongue showed normal size and movement and normal coating.

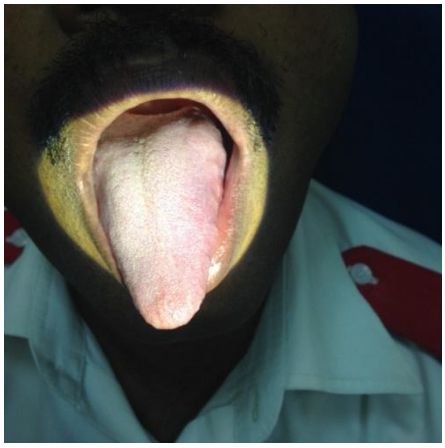


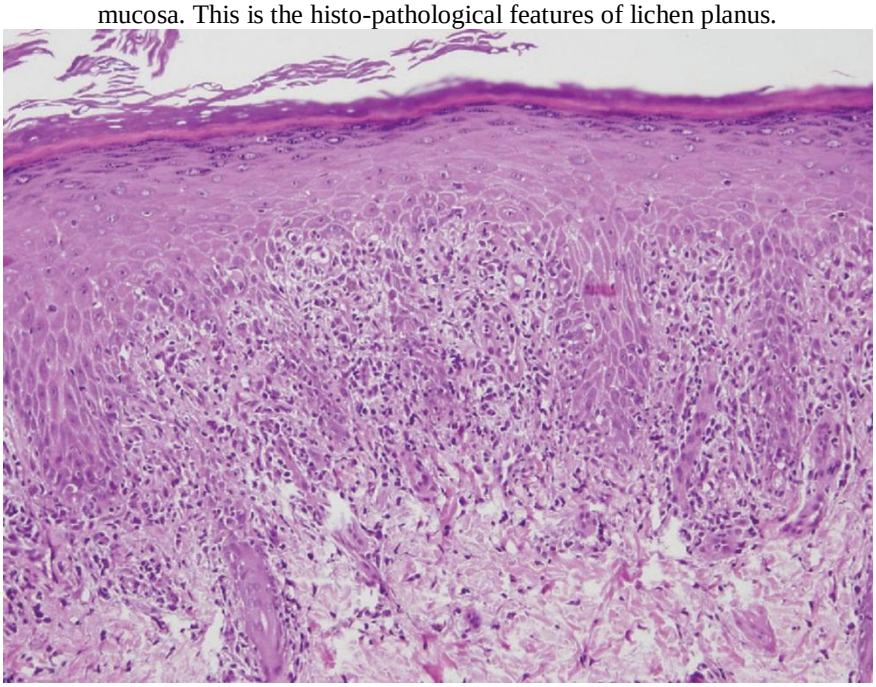
Figure 4:- mixed white and red lesion on lateral posterior border of the tongue.

A differential diagnosis had been given to the lesion: Lichen planus, leukoplakia plus erythroplakia, sequamous cell carcinoma.

The patient sent for biopsy from the tonguelesion to confirm the diagnosis, a soft tissue piece of tongue mucosa measured 0.4x0.3x0.2cmwas taken and sentfor histopathology examination.

The histo-patholgical examination revealed an ulcerative surface,hyper keratosis,focal hyper granulosis, areas of irregular acanthosis,saw teeth rete pegs and basal cell layer degeneration,with band like infiltrate of lymphocytes in the sub-mucosa. This is the histo-pathological features of lichen planus figure [5].

Figure 5:- A tissue section stained with H&E showedhyper keratosis, focal hyper granulosis, areas of irregular acanthosis, saw teeth rete pegs and basal cell layer degeneration, with band like infiltrate of lymphocytes in the sub-mucosa. This is the histo-pathological features of lichen planus.



The treatment plan was toinstruct the patient by prevent eating spicy, sour ,worm food and carbonic beverages ,use high potency topical corticosteroids Beclomethasone dipropionate spray, if not effective 5 mg of prednisolone twice daily with weekly follow up to monitor the dose of medication and the lesion progress. Improve patient oral hygiene, by scaling and polishing and use ofchlorhexidine 0.2% mouth rinse which is suggested to improve oral lichen planus [3].

Discussion:-

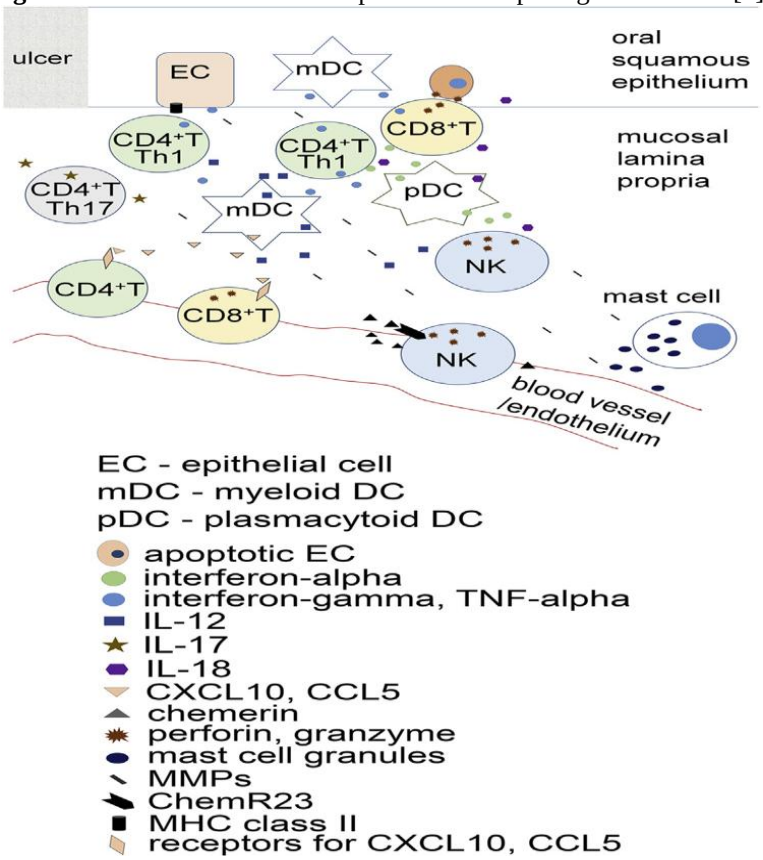
Oral lichen planus is a T-cell mediated autoimmune disease in which T-cell, CD8 triggers basal cell apoptosis, it is a chronic inflammatory disease,the disease is seen in 1-2% of population.

Oral lichen planusmay present along with skin lesion or alone ,ithas several clinical presentations :reticular,papular,plaque like,annular,atrophic,erosive ,and bullous type or could be combination of more than one type.Common involved sites in oral cavity are:buccal mucosa[bi-lateral],tongue,gingiva. Skin lesion present as flat top papulesin wrist ,ankles and genitalia. The oral lesion could be without skin lesion.

Genetic ,stress ,infections my trigger the disease. The lesion could be asymptomatic [plaque reticular or with pain of burning quality like in [atrophic and erosive].When the lesion is reticular type and bi-lateral on buccal mucosa, the diagnosis will done based on clinical findings[Wickhamsstriae],but when it is atrophic or erosive or it is superimposed with candida infection, the differential diagnosis can include lichenoid reaction,lupus erythematosis,pemphigus,leukoplakia ,the lesion should be biopsied to confirm the diagnosis [4].

The histo-pathological characteristics of oral lichen planus is the basal cell hydropic degeneration, saw teeth rete peges ,lymphocytic band infiltration in sub epithelia ,epithelial hyperplasia with no dysplasia ,hyperkeratosis,acanthosis with necrotic keratinocytes[5].OLP may present with several autoimmune diseasesasSjogrensyndrome,systemic lupus erythematosus, Hashimotos thyroiditis[6,7].The immune-pathogenesis in OLP havefocused on erosive and reticular forms**.**importantcells and soluble factors contributes[Figure 6] that demonstrate a hypothetical model of interactions implicated in OLP[8].

Figure 6:- Cells and molecules implicated in the pathogenesis ofOLP[8].



In the Lichen planusmanagement , yet no treatment that leads to complete remission or remission for long time, but there is improvement in the lesion and it's symptoms .Many treatment modalities had been implicated in oral lichen planus treatment, like topical corticosteroids withhigh potency, remain the most reliably effective. Topical cyclosporine, or systemic corticosteroids may be indicated when the lesion show no response to topical corticosteroids.Topical retinoidin combination with topical corticosteroids for reticular or hyperkeratotic lesions,CO_2 laser,Patients should be followed-up periodically to monitor atrophic-erosive lesions and adjust the medication dosage.

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