Oral Lichen Planus Erosive Type: a Case Report in Indonesian Male Patient

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Oral Lichen Planus Erosive Type: a Case Report in Indonesian Male Patient

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Abstract

Oral Lichen Planus (OLP) is an autoimmune disorder with unknown etiology that affects the oral mucous. OLP erosive form considered as precancerous lesion. The diagnosis made by clinical features and biopsy to exclude dysplasia and malignancy.

The aim of this study to know a case of OLP erosive in male patient and to discuss the main aspects of this disease.

47 years old male Javanese patient came with chief complaint of presisten ulcer since 1 year ago. Patient had a history of drug and food allergic reaction, hypertension (170/100 mmHg), and Diabetes Mellitus (HbA1C > 7). Patient often smoke (±24 cigarret daily) and alcoholic since young. Patient sometimes fatigue and stress. Intra Oral (IO) examination showed a white papular lesion, unscrapable, rough, firm, multiple, measuring ± 1 x 2 cm surrounded by painful erosion with erythematous area, irregular and diffuse, bilateral on buccal mucosa dextra and sinistra.

Patient treated with antiseptic oral rinse, topical and systemic corticosteroid. Patient reffered to Patologist Anatomy to get a scrapping test. Patient came for control showing the healing process. Patient showed an improvement after treatment.

OLP erosive form is a precancerous lesion that possible transform to malignancy. Early detection and treatment is necessary.

Case report (J Int Dent Med Res 2017; 10(2): pp. 380-383)

Keywords: Oral Lichen Planus, Precancerous Lesion, Early Detection, Autoimunne.

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Introduction

Oral lichen planus (OLP) is a common disorder affects the mucous membrane of the oral cavity which is stratified squamous epithelium. OLP occure mostly in the fourth to sixth decades of life, and common in women than men. The Etiopathogenesis is still uncertain. Specific and non-specific mechanisms may be involved in the etiopathogenesis. The specific mechanism involves the presentation of antigen by keratinocytes which auto-cytotoxic T lymphocytes trigger apoptosis of epithelial cells leading to chronic inflammation, and the non-specific mechanism includes degranulation of mast cells and activation of matrix metalloproteinases (MMPs).[1]

OLP Erosive form is considered as precancerous lesion. OLP has potential for malignant transformation and the risk of malignant transformation varies between 0.4 to 5% in a period of observation from 0.5 to 20 years. However, many controversies remain with regard to the risk of malignant transformation. The characteristic clinical aspects are sufficient to make a correct diagnosis. An oral biopsy with histopathologic examination recommended to confirm clinical diagnosis and also to exclude dysplasia and malignancy.[2]

The aim of this study to know a case of OLP erosive in 47 years old Javanese male patient and to discuss the main aspects of this disease in relation to etiopathogenesis and treatment.

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Case Report

47 years old male Javanese patient came with chief complaint of presisten ulcers since 1 year ago. Patient had a history of drug and food allergic reaction, hypertension (170/100 mmHg), and Diabetes Mellitus (HbA1C > 7). Patient often smoke (±24 cigarret daily) and alcoholic. Patients often travel abroad for business, patient sometimes fatigue and stress.

Intra Oral (IO) Examination showed solitary mixed red and white papular lesions, irregular shape, measuring about ± 2 ×3 cm posterior buccal mucosa extending to anterior, bilateral on buccal mucosa dextra and sinistra, surrounded by painful erosion has central area of erythema surrounded surface by white striae, irreguler and diffuse, on palpation inspection were tender, smooth, and nonscrappable lesion. Patient had poor oral hygine. Gingiva was observed, generalized gingival inflammation, erythematous, tender, upper and lower side of anterior posterior gingiva had typical white striae (Figure1.)

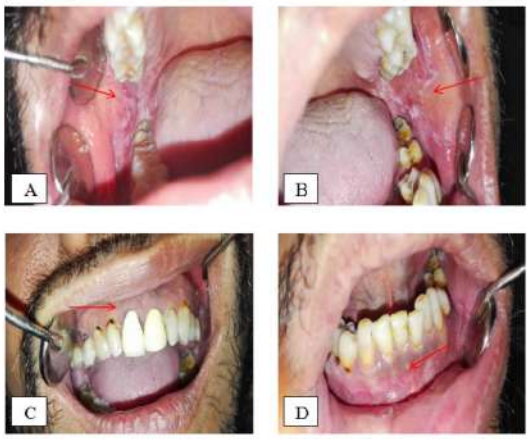

Figure 1. Patient IO examination with OLP before treatment (a) Dextra Buccal Mucosa; (b) Sinitra Buccal Mucosa; (c) Upper Anterior Gingiva; (d) Lower Anterior Gingiva.

Extra Oral (EO) Examination showed no anomaly. Considering history and clinical features Oral Lichen Planus Erosive was considered as Provisional Diagnosis (PD) with the Differential Diagnosis (DD) Phemphigus Vulgaris (PV).Patient treated with antiseptic oral rinse, topical and systemic corticosteroid.

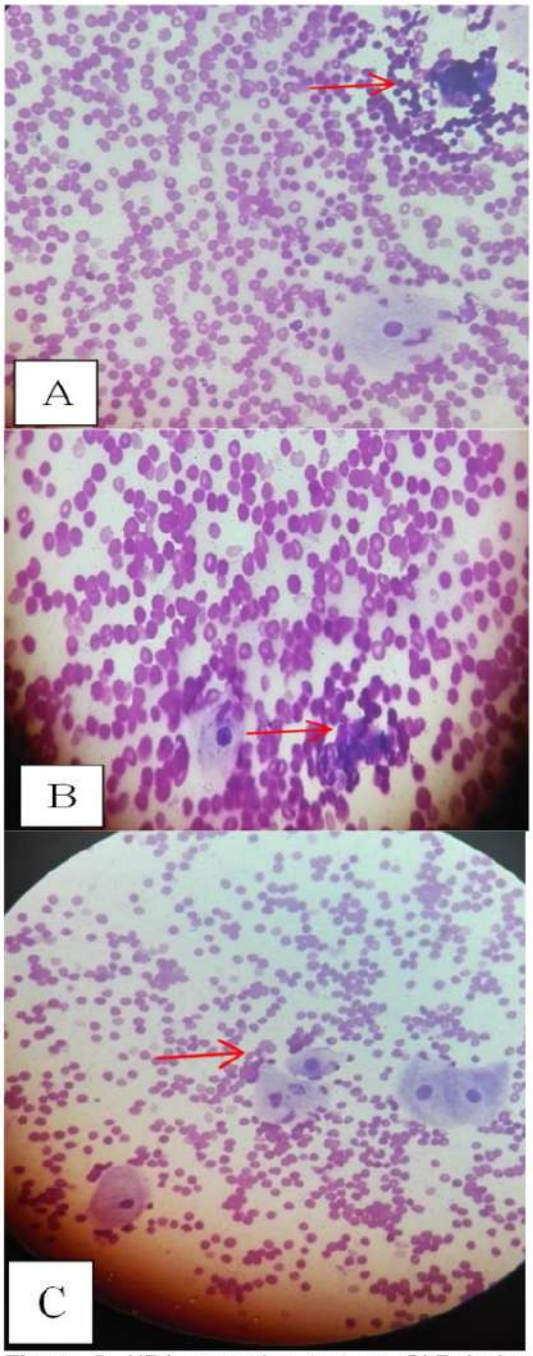

Figure 2. HPA scappting test on OLP lesion result with Hematoxylin Eosin (HE) staining and 100x magnifications, (a,b,c) marked a band like lymphocytes infiltration without cell dysplasia.

Patient reffered to Patologist Anatomy to get a scrapping test, marked a band like lymphocytes infiltrate without displasia (Figure 2). Patient came for control shown the healing process. Patient showed an improvement after treatment (Figure 3).

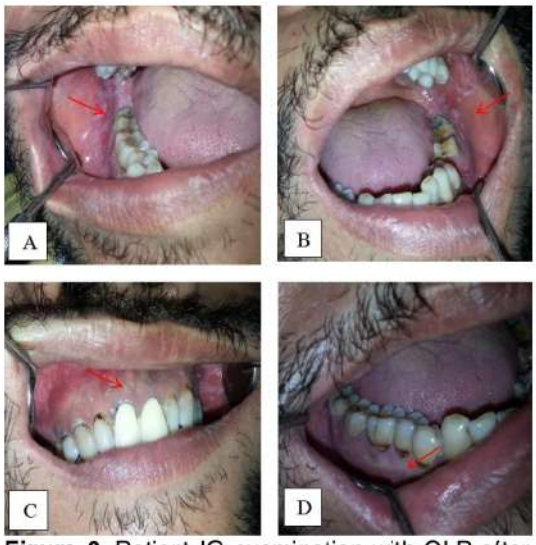

Figure 3. Patient IO examination with OLP after treatment shown healing process (a) Dextra Buccal Mucosa; (b) Sinitra Buccal Mucosa; (c) Upper Anterior Gingiva; (d) Lower Anterior Gingiva.

Discussion

Oral Lichen planus (OLP) is a chronic autoimmune disease with an unknown etiology that is marked by the invasion of lymphocytic infiltrate within the epithelial tissue inducing epithelial cell apoptosis and chronic inflammation. Prevalence OLP in the world about 1-2% of world population. The different etiological factors considered for OLP are genetic background, dental materials, drugs, infectious agent, autoimmunity, immunodeficiency, food allergy, stress, habits, trauma, diabetes, hypertension, malignant neoplasm, and bowel diseases[2,3,4].

The pathogenesis of OLP is thought of from four mechanisms Antigen specific cell mediated immune response (Heat Shock Proteins, CD4+ T helper cells, CD8+ cytotoxic T cells) Nonspecific mechanism (epithelial basement membrane, mast cells, chemokines, matrixmetaloproteinases) autoimmune response, humoral immunity (circulating autoantibodies to desmoglin 1 and 3)[5,6,7]. OLP is a T-cell-mediated autoimmune disease. Inflammatory cells involved in this process consist of T helper and T cytotoxic lymphocytes, natural killer (NK) cells, and dendritic cells. T-cell activation is central to the pathogenesis of the pathology. Cytotoxic T-cell infiltration into the epithelium results in apoptotic basal keratinocytes. OLP is a complex disease and can be caused or triggered by genetic malfunction and/or environmental factors. The existence of familial cases of LP may suggest a possible genetic predisposition[8,9].

The choice of OLP treatment depends on the severity and the discomfort. Unfortunately, there is no treatment to permanently resolve the lesions. The recommended treatment for OLP consists on topical corticosteroids in order to reduce symptoms and improve the quality of life of the patients[10].

Maintenance of good oral hygiene can enhance healing and lessen symptoms, and exacerbating factors should be minimized or removed[11]. However, in case of persistent lesions, systemic corticosteroids are indicated. Thus, considering the importance of this pathology and the high incidence in the population and can transform to malignancy[12]. In some OLP cases, P53 and P16 gene in saliva or serum increase which indicate that OLP can transform into malignancy condition[13,14].

In this study patient treated with antiseptic oral rinse 3 times daily (Chlorhexidine Gluconate 0,21% 120ml Minosep® by Minorock ltd, Indonesia) to improve the Oral Health. Topical corticosteroid were administrated 3 times daily (Triamcinolone Acetonide in orabase 0,1% Kenalog® by Taisho, Indonesia) showed best result. Systemic corticosteroid (Prednison 10 mg) were administered 3 times daily depending on severity of lesion. Systemic steroids are indicated for brief treatment of severe exacerbations of OLP. Corticosteroids have shown to be predictable and effective medications for controlling signs and symptoms[15].

In most of the OLP patients two week course of topical corticosteroids will resolve inflammation and symptoms, however, there are cases which are refractory to the prolonged use of topicalcorticosteroids[15]. Although various therapies have been tried in patients with OLP, still the golden standard is topical corticosteroid use which has certain side effects especially

when used for longer period of time. Reported side effects include candidiasis, gastrointestinal disturbances, diabetes, hypertension, moon face and adrenal insufficiency[11].

Furthermore, in some cases the use of corticosteroids has proven to be ineffective. Therefore, new OLP treatment options are to be searched. Homeophatic treatment, Methot rexate treatment, Photodynamic Therapy (PDT), application of Stem Cell from Plasma Rich Fibrin, and Surgical management, including cryosurgery and carbon dioxide (CO2) laser, has been performed on OLP lesions treatment, but surgical excision is not recommended as the first-choice treatment due to the inflammatory condition, which can reoccur[16,7,18].

Conclusions

The term OLP is a T-cell-mediated heterogeneous group of disease with associated mucosal lesions with unclear etiology caused by multifactorial agents. OLP has 6 clinical types such as erosive type which is often painful and debilitating. Golden standard for OLP treatment is topical or systemic corticosteroid but has certain side effects especially when used for longer period of time. Therefore, new OLP treatment options are to be searched such as homeopathic therapy, Methotrexate treatment, Photodynamic Therapy (PDT), application of Stem Cell from Plasma Rich Fibrin, and Surgical management, including cryosurgery and carbon dioxide (CO2) laser. Since there is a close association of OLP with psychological factors like stress and depression psychiatric counseling can also prove to be beneficial in the treatment line. In addition, OLP erosive form is a precancerous lesion that possible transform to malignancy. Early detection and treatment is necessary to improve QoL OLP patient.

Acknowledgements

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