



Review Article

A Review of Oral Lichen Planus and its Management with Herbal Treatment

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ABSTRACT

Oral Lichen Planus (OLP) is an inflammatory disorder that affects the mouth. Oral mucosa primarily affects women in their forties and fifties. OLP is a localized autoimmune disorder caused by T-cell malfunction, according to previous research. The tongue, buccal mucosa, and gingiva are the most prevalent sites for OLP. The distribution of oral lesions is always symmetrical and bilateral. Oral leukoplakia and oral erythro leukoplakia might be mistaken for plaque-like and atrophic/erosive OLP, respectively. Because OLP is an immunologically mediated condition, corticosteroids are the most effective treatment. Herbal medicine, which has anti-inflammatory and antioxidant qualities, appears to be a viable alternative therapy. As a result, the goal of this research was to describe the efficacy of different OLP treatments.

INTRODUCTION

Lichen Planus is an autoimmune disease induced by T cells [1-3]. It affects the skin, scalp, nails, and mucosa [4,5]. Symptoms include mouth discomfort, sensitivity to spicy foods, pain in the oral mucosa, ulceration, erythema, and bleeding [6,7]. There is yet to be discovered an effective medicine for the treatment of OLP disease [8-10]. Corticosteroids, retinoids, calcineurin inhibitors, laser, and phototherapy are some of the treatment choices. Although extensive research has been conducted in order to find safe and effective pharmaceuticals [11,12]. Herbal therapy with antioxidants and anti-inflammatory properties, for

example, is a fantastic alternative medicine option [13]. Herbal medicine is widely used in China and Taiwan to cure inflammation of the mouth's mucous membranes and to reduce the negative effects of chemical medications [14]. Several researches comparing the effects of the herbal medication have been undertaken and corticosteroids, as well as the efficacy of their combination in the treatment of the disease. Combining herbal remedies with corticosteroids has been shown in recent studies to reduce unwanted effects while increasing the drug's efficiency [15-21].

Etiology: T cells produce OLP, a chronic inflammatory oral mucosal disease that affects both men and women with no recognized cause. The etiology has been linked to a number of causes, including [7,22,23].

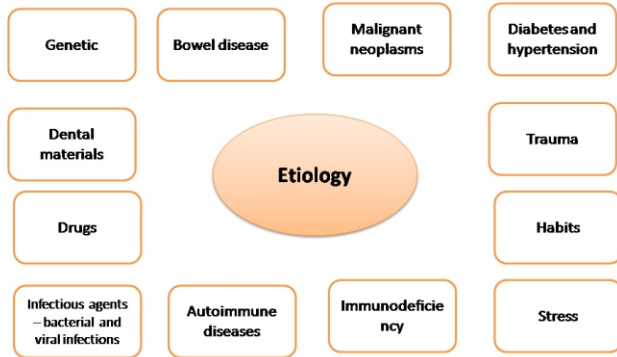


Figure 1: Causes of OLP

The clinical characteristics of the most common oral lichen planus and lichenoid diseases. Some of these conditions appear to be uncommon, while others are unclear or may be a misnomer [24].

Disease	Clinical
Oral lichen planus	White reticular patches on both sides, not necessarily symmetrical, commonly affect the buccal mucosae. At times, erosions and patches of atrophy can be seen. Scarring lesions are uncommon
Oral lichenoid contact lesion	It could be unilateral or bilateral. Amalgam fillings have a common topographic association. Gingiva is unusually affected.
Oral lichenoid drug reaction	OLP is similar, if not identical. There is sometimes a temporal link between new drug intake and new drug intake. When compared to OLP, unilateralism is more widespread.
Graft vs. Host disease	Chronic GVHD is similar to, if not identical to, OLP. Common scarring lesions that resemble leukoplakia Previously, you had a bone marrow transplant.
Erythema Multiforme	Chronic GVHD is similar to, if not identical to, OLP. Common scarring lesions that resemble leukoplakia Previously, you had a bone marrow transplant.
Discoid lupus Erythematosus	More commonly, core atrophic areas or shallow erosions generate asymmetric lesions with radiating white striae at edges and telangiectasia ('sunburst'). When compared to OLP, the properties are much less well defined.
Systemic lupus Erythematosus	Oral ulcers are similar to DLE and/or OLP. Erythema on the bridge of the nose and on the face's malar eminences ('butterfly rash')
Lichen planus pemphigoides	Cutaneous blisters, as well as oral and cutaneous characteristics that are suggestive of LP
Chronic ulcerative stomatitis	OLP is similar, if not identical.
Paraneoplastic pemphigus	PNP stands for paraneoplastic pemphigus, a deadly autoimmune blistering condition caused by an underlying tumor.
Paraneoplastic autoimmune multiorgan syndrome	A variety of signs and symptoms characterize the paraneoplastic autoimmune multiorgan syndrome, including severe desquamative stomatitis and a polymorphous cutaneous eruption (PAMS).
Fixed drug eruption	Erythematous mucous membrane lesions that may or may not become ulcerated
Lichen sclerosis	Patches that are mostly white

Table 1: Classification of Oral Lichen Planus

Diagnosis: Following that, we'll look at several potential biomarkers for diagnosing OLP [25](Table 2).

Potential biomarker	Level in OLP patients
Antioxidants (vitamin C and E)	Decrease
Immunoglobulin	Increase
Peroxidation products	Increase
Cortisol	Decrease
GPCA (anti-gastric parietal cell autoantibody)	Increase

Table 2: Potential Biomarkers to Diagnose Oral Lichen Planus

Role of Herbal Medicine in Management of OLP: OLP is an immunological disease that mostly affects mucous membranes, particularly in the mouth. Nerviness and adaptogens are two herbal remedies that could be beneficial for treating symptoms or treating causes.

Herbs	Actions
Aloe vera	The juice and cream of aloe vera can be used to treat oral sores. Because of its anti-inflammatory properties, aloe vera gel can help relieve discomfort and shrink oral sores [26].
Curcumin	Curcuminoids at high doses are effective in reducing symptoms. Can help to lessen the size and pain of lesions. After the patient has been treated with corticosteroids, it may be useful as a preservation medicine [27].
Glycyrrhiza glabra	Clinical improvements have been reported at least 2-3 symptoms of OLP after treatment with . Glycyrrhizin [28].
Purslane	Can improve the symptoms and sign with the least side effects [29].
Traditional Chinese medicine	Liuwei Dihuang, Tripterygium glycosides and Zengshengping are Chinese medicine and used as a treatment of OLP, which improve symptoms, including reducing the size of oral leukoplakia [30].
Raspberry leaf extract	Reduces the degree of discomfort, as well as the clinical aspects of erosion, reticulation, and ulceration, as well as cutaneous symptoms [31].
Lycopene	Can reduce the symptoms of OLP due to its antioxidant properties [32].

Table 3: Herbal Treatment of Oral Lichen Planus

CONCLUSION

OLP is a chronic autoimmune disease for which there is now no conclusive and comprehensive treatment. Corticosteroids, on the other hand, were regarded as a palliative treatment for this disease, despite their considerable side effects. As a result, numerous investigations have been conducted in order to develop an alternate treatment. Herbal therapy is more essential than other alternative therapies since it has fewer side effects and better cost-benefit ratios. However, many of the findings are from preliminary research and need to be validated.

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