Current controversies in oral lichen planus: Report of an international consensus meeting. Part 2. Clinical management and malignant transformation

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Despite recent advances in understanding the immunopathogenesis of oral lichen planus (LP), the initial triggers of lesion formation and the essential pathogenic pathways are unknown. It is therefore not surprising that the clinical management of oral LP poses considerable difficulties to the dermatologist and the oral physician. A consensus meeting was held in France in March 2003 to discuss the most controversial aspects of oral LP. Part 1 of the meeting report focused on (1) the relationship between oral LP and viral infection, with special emphasis on hepatitis C virus (HCV), and (2) oral LP pathogenesis, in particular the immune mechanisms resulting in lymphocyte infiltration and keratinocyte apoptosis. Part 2 focuses on patient management and therapeutic approaches and includes discussion on malignant transformation of oral LP. **(Oral Surg Oral Med Oral Pathol Oral Radiol Endod 2005;100:164-78)**

Oral lichen planus (LP) is a chronic inflammatory oral mucosal disease of unknown cause. The clinical management of oral LP poses considerable difficulties to the dermatologist and the oral physician.[1]

The authors met in France between March 9 and 15, 2003, to produce a consensus document based on the most recent literature published in peer-reviewed international journals. Some aspects of LP to be discussed were previously decided by the panel and assigned to each participant according to her/his field of expertise. During the meeting a report was presented by the author and discussed by the panel.

Selected articles published after March 2003 were included by the authors in the reference list.

The aspects of oral LP discussed and presented in the current 2-part review include viral infection and immunopathogenesis (Part 1)[2] and clinical management and malignant potential (Part 2).

THE MANAGEMENT OF ORAL LICHEN PLANUS

Although oral LP is often asymptomatic, the atrophic-erosive form can cause symptoms ranging from burning sensation to severe pain, interfering with speaking, eating, and swallowing.[3-5] Patients with symptomatic oral LP often require therapy and should be treated if symptoms are significant.[6]

As oral LP is a chronic disease, the patient's medical history, psychological state, and treatment compliance, as well as possible drug interaction, must be considered when evaluating the cost effectiveness of any treatment modalities.[7] When oral lichenoid lesions are suspected to be related to the use of a given drug,[8] the medication should be discontinued whenever possible.

Plaque and calculus deposits are associated with a significantly higher incidence of erythematous and erosive gingival oral LP lesions,[9] whereas good oral hygiene is essential and can enhance healing.[10,11] Mechanical trauma of dental procedures, friction from sharp cusps, rough dental restorations, and poorly fitting

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dental prostheses can be exacerbating factors of symptomatic oral LP and should receive attention. Furthermore, dental amalgam restorations can cause oral lichenoid lesions which may improve following replacement of amalgam with other restorative materials.[12-16] Although it has been suggested that lesions in close anatomic contact with amalgam fillings in patients with positive patch tests to mercury compound should be replaced, resolution of the lichenoid area cannot be assured[17] and even composite resin restorations can occasionally induce lichenoid lesions.[18] Moreover, metal-ceramic crowns do not seem to facilitate the healing of the lesions to the same extent as the gold crowns,[14] although some reports have highlighted many allergic reaction to gold salts, too.[19-22]

The psychological profile of the oral LP patient should also be taken into account. Studies have reported higher levels of anxiety, greater depression, and increased psychic disorders in oral LP compared with a control group,[23] and stress is one of the most frequent causes of acute exacerbations in oral LP patients.[4,24]

Various treatment regimens (Table I) have been designed to improve management of symptomatic oral LP, but a permanent cure is not yet possible.[7,25] Several treatments lack adequate controlled studies. Few randomized controlled trials have been carried out, usually involving small numbers of patients and reporting for the most part favorable responses to the studied treatment, suggesting publication bias.[26,27] Because of the great heterogeneity of the published reports, many data cannot be directly compared and meta-analysis is problematic.[27] Curiously, several suggested treatment modalities are also suspected to induce lichenoid lesions. Treatment approaches to oral lichen planus are suggested in Fig 1.

Corticosteroids

Systemic corticosteroids. Systemic corticosteroids are probably the most effective treatment for patients with diffuse erosive oral LP or multisite disease, but the literature on their use is limited to nonrandomized clinical trial. Both methyl prednisolone[28] and prednisone[29] have been employed for recalcitrant severe erosive oral LP. Systemic prednisone can be used to control the ulcers and erythema in oral LP but it is not better than treatment with topical triamcinolone acetonide alone.[30] Interestingly, topical corticosteroids have been found to be equally or more effective than systemic corticosteroids or the combination of the two.[31,32] Systemic corticosteroids may be indicated in patients whose condition is unresponsive to topical steroids or in patients with mucocutaneous disease and in high doses (1.5-2 mg/kg/daily), but adverse effects are possible even with short courses.[6,32]

Table I. Empirical treatments for oral lichen planus (modified from Carrozzo and Gandolfo[3])

Corticosteroids
Topical
Betamethasone phosphate
Betamethasone valerate*
Clobetasol propionate*
Fluocinolone acetonide
Fluocinonide*
Fluticasone propionate
Hydrocortisone hemisuccinate
Triamcinolone acetonide
Systemic
Prednisone
Methylprednisolone
Retinoids
Topical
Fenretinide
Isotretinoin*
Tazarotene*
Tretinoin*
Systemic
Acitretin**
Etretinate
Isotretinoin
Temarotene
Tretinoin
Immunosuppresive agents
Azathioprine
Cyclosporin*
Others
Amphotericin A
Basiliximab
Diethyldithiocarbamate
Dapsone
Doxycycline
Enoxaparin
Glycyrrhizin***
Griseofulvin#
Hydroxychloroquine sulphate#
Interferon#
Levamisole#
Magnetism
Mesalazine#
Phenytoin#
Photopheresis
Psychotherapy#
PUVA#§
Reflexotherapy
Surgery#
Tacrolimus
Thalidomide***

*Placebo-controlled studies confirm their efficacy in oral lichen planus.
**A placebo-controlled study of 65 patients with LP, some of whom had mucous membrane involvement, has been carried out. However, the authors did not specify clearly neither the percentage of the study population with oral involvement nor the response criteria for oral cavity lesions.[109]
***In a study, glycyrrhizin therapy was compared with patients only having dental cleaning.
#Treatment modalities suspected to induce lichenoid lesions.
§A controlled study with split-mouth design has been carried out.[129]