Making sense of mouth ulceration: part six

Crispian Scully[1]

Skin disorders

The main skin disorders that may present with mouth ulceration include particularly lichen planus, but also:

- Pemphigus
- Pemphigoid
- Dermatitis herpetiformis
- Linear IgA disease
- Epidermolysis bullosa
- Erythema multiforme.

Lichen planus

This article discusses lichen planus – the most common skin disease with oral lesions, and the last group of the systemic causes of mouth ulceration (skin disorders).

Lichen planus (LP) is a common mucocutaneous disorder; an inflammatory autoimmune-type of disease that can affect stratified squamous epithelia – the skin, oral mucosa and genitalia.

Lichen planus usually affects persons aged between 30 and 65 years, with a slight female predisposition.

Tumour necrosis factor-alpha (TNFα) homozygous polymorphisms may cause cutaneous lesions. The antigen(s) responsible are unknown and studies looking for any causal bacteria, fungi and viruses have proved negative. Antigen-processing cells (Langerhans cells) appear first and lead to a mononuclear inflammatory cell infiltrate, in the upper lamina propria, mainly of CD8+ T-cells that release T-cell cytokines such as TNFα and interferon-γ (IFNγ), cause apoptosis and vacuolar degeneration in basal keratinocytes, and lysis in the epithelial basement membrane zone (EBMZ).

The clinical appearance of an oral ulcer on its own is rarely diagnostic though in lichen planus, white lesions are typically also seen (Figure 1).

Lichen planus is often asymptomatic but may cause mild oral discomfort or burning sensations especially when eating or drinking substances that are acidic or spicy. For some, discomfort can be severe.

Lichen planus presents orally mainly with bilateral white lesions – of which there are six clinical types, often mixed (Figure 2):

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Figure 1: White lesions are invariably seen in lichen planus.

Figure 2: Lichen planus reticular and erosive.

Figure 3: Lichenoid reaction to amalgam.

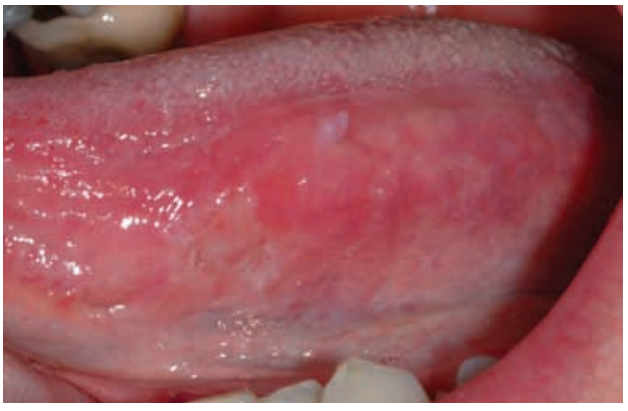

Figure 4: Lichen planus and cancer.

- Reticular, network of raised white lines (striae)
- Papular
- Plaque-like, white patches simulating leukoplakia
- Red atrophic areas – or desquamative gingivitis
- Erosive/ulcerative – persistent, irregular
- Bullous (rare; possibly superficial mucoceles).

The rash, if present, is characterised by lesions, which are:

- Purple
- Polygonal
- Pruritic (itchy)
- Papules – often crossed by fine white lines (Wickham's striae).

Lichen planus may also involve:

- Anogenital mucosae:
  - 'Vulvovaginal-gingival syndrome' (Pelisse)
  - Peno-gingival syndrome
  - Anal LP
- Nails: uncommon ridging, shedding or destruction
- Scalp: uncommonly affected
- Eyes: rare conjunctival involvement.

Lesions that are clinically and histologically similar to lichen planus – termed 'lichenoid lesions' – are sometimes caused by:

- Drugs, especially NSAIDs
- Dental restorative materials (Figure 3)
- Chronic graft-versus-host disease
- Infection with hepatitis C virus
- Other systemic disorders (eg, hypertension, diabetes).

Lichenoid reactions may be unilateral.

Differential diagnosis includes:

- Lupus erythematosus
- Chronic ulcerative stomatitis
- Keratosis
- Carcinoma.

A firm diagnosis of LP relies on lesional biopsy and histopathological examination.

A physician opinion is indicated if:

- There is HCV infection
- There is other systemic background
- Drugs are implicated
- There is skin, genital or ocular involvement.

In the management of lichen/lichenoid lesions, it may be wise to consider removal of amalgams, but no tests (eg, patch tests) will reliably help guide this decision.

Symptoms can often be controlled with topical medications such as benzydamine hydrochloride (0.15%) spray or mouthrinse and 2% lidocaine gel.

There is no evidence base for many of the therapies associated with lichen planus:

Mild lichen planus

- Topical aloe vera may help symptomatically
- Topical corticosteroids are the mainstay
- Initial use of a high potency drug such as clobetasol, fluocinonide or fluticasone, followed by a lower potency drug (eg, hydrocortisone hemisuccinate, betamethasone, triamcinolone acetate or fluocinolone).

Moderate lichen planus (severe or extensive oral involvement)

- Topical ciclosporin along with a high or super potent t opical corticosteroid
- Topical tacrolimus.

Severe lichen planus (in multiple sites)

- Systemic corticosteroids (prednisolone, deflazacort), or other immunomodulatory agents (eg, mycophenolate mofetil or biologics).

Lichen planus, and especially lichenoid lesions, have a small malignant potential – probably in less than 1-3% and predominantly in non-reticular lesions and on tongue (Figure 4).

NICE guidelines clearly state that patients with oral lichen planus should be monitored for oral cancer as part of the routine dental examination.

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