Sore mouths and itchy wrists

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Oral soreness is a frequently encountered complaint in clinical practice with a large number of possible causes. Figures 1 and 2 below are clinical photographs taken of the mouths of two different late-middle-aged patients complaining of long-standing oral soreness, particularly associated with the ingestion of acidic, spicy foods and drinks. On direct questioning, both admitted to having pruritic rashes on the flexor aspects of the wrists and forearms which had appeared several months previously (figure 3). Both patients have oral manifestations of the same mucocutaneous condition. Study the photographs below and say whether the following statements are true or false.

Figure 1

Figure 2

Figure 3

Questions

- 1 The oral lesions are:
 - A caused by *Candida albicans*
 - B associated with an elevated titre of IgG autoantibodies to the intercellular substance of the epithelium
 - C typically bilateral
 - D usually painless and associated with urethritis, conjunctivitis and arthritis
 - E a recognised marker of internal malignancy.
- 2 Cutaneous manifestations of this condition include:
 - A alopecia
 - B nail pitting
 - C violaceous papules with Wickham's striae
 - D photosensitive rash
 - E an association with a positive Koebner's sign.
- 3 In the management of this condition:
 - A the oral lesions rapidly respond to oral metronidazole at doses of 200 mg tid for 7 days
 - B biopsy will typically show features of dysplasia
 - C liver function tests should be considered
 - D a careful drug history should be taken
 - E topical steroids are curative.

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Answers

QUESTION 1

A False Whilst the white lacy appearance might be mistaken for lesions of acute pseudomembranous candidiasis or thrush, the faint white striae present on the buccal mucosa have the classical appearance of reticular lichen planus and, unlike thrush, are not rubbed off to leave a red area of mucosa. Lesions can become secondarily infected with *Candida* with resultant exacerbation of oral soreness.

B False This is found in pemphigus vulgaris.

C True Both the oral and cutaneous manifestations of lichen planus are classically symmetrical. In the mouth, the tongue, gingivae, buccal and labial mucosa may be affected. In addition to the *reticular* (figure 1) and *erosive* (figure 2) lesions shown here, *papular*, *plaque*, and *atrophic* types of oral lichen planus are recognised and may coexist. Pigmentation of the mucosa can occur on healing and is most marked in patients with pigmented skin.

D False The oral lesions of lichen planus may be asymptomatic but are not associated with Reiter's syndrome in which the classical oral lesions are painless superficial ulcers.

E False Both pemphigus vulgaris and benign mucous membrane pemphigoid have been suggested to be associated with internal malignancy in a small number of patients. As one might expect given its high prevalence, lichen planus can coexist with neoplasia at other sites in about 6% of cases, but it cannot be said to be a marker of internal malignancy.

QUESTION 2

A True Permanent scarring alopecia is a recognised complication of lichen planus.

B True Nail involvement is thought to occur in up to 10% of patients and varies from longitudinal grooving and pitting to permanent nail loss.

C True The cutaneous lesions of lichen planus tend to start on the limbs, particularly affecting the forearms and wrists as pruritic, flat-topped, polygonal papules a few mm in diameter which may have a delicate lace-like pattern of white Wickham's striae on their surface. The papules are initially red but subsequently become violaceous. The skin of the neck, genitalia, palms and soles may also be affected. The skin lesions subside within 9 months in about 50% of cases and in 85% have cleared within 18 months.¹

D False Lichen planus, unlike lupus erythematosus, is not associated with a photosensitive rash.

E True Lichen planus shows the Koebner phenomenon, ie, lesions appear in an area of linear trauma such as a scar or a scratch. Other dermatological conditions exhibiting this phenomenon include psoriasis, molluscum contagiosum, warts, and vitiligo.

QUESTION 3

A False Oral metronidazole is of no recognised therapeutic use in the treatment of lichen planus.

B False In the reticular type of lichen planus

the histological appearance classically shows hyperpara- or ortho-keratosis, saw-tooth-like rete ridges and a band-like lymphocytic infiltrate. There is typically no dysplastic change. The premalignant potential of oral lichen planus is a contentious issue but some have suggested a malignant transformation rate of 1–10%.²

C True Associations of lichen planus with chronic active hepatitis and primary biliary cirrhosis have been reported.³

D True To exclude a lichenoid drug reaction which may resemble lichen planus but is usually not symmetrically distributed. Drugs associated with oral lichenoid reactions include gold salts, nonsteroidal anti-inflammatory agents, antimalarials, and methyldopa.

E False Topical steroids may reduce the oral symptoms but are not curative.

Discussion

Lichen planus is a relatively common chronic mucocutaneous disorder of uncertain, possibly autoimmune, aetiology which, if untreated, in the mouth may give rise to prolonged oral soreness and on the skin may cause an intensely pruritic symmetrical rash. The prevalence of oral lichen planus in the general population is approximately 2%⁴ with a wide variation (4–44%) in the proportion of patients with oral lesions having concurrent cutaneous lesions.⁵ It is predominantly a disease of late middle age and is rarely encountered at the extremes of age. Before the age of 50 years both sexes appear to be affected equally; after this there is a slight female predominance.⁶

There is a wide variation in the extent of discomfort associated with oral lichen planus: complaints of oral discomfort exacerbated by acidic or spicy foods are more common with the atrophic or erosive types. The natural history of the oral disease is variable with periods of exacerbation which may be associated with times of stress. In addition to an association with autoimmune liver disease, lichen planus has been linked with diabetes mellitus and impaired glucose tolerance. In such cases it seems likely that high blood glucose levels lead to candidal superinfection of pre-existing lichen planus lesions and oral soreness. Oral lesions can exist in isolation and may persist for many years after the resolution of cutaneous lesions. In one study only 32% had cutaneous lesions when oral lichen planus was initially diagnosed.

The differential diagnosis of oral lichen planus includes candidiasis, leukoplakia, squamous cell carcinoma, lichenoid reactions and lupus erythematosus. A thorough drug history is of paramount importance where a lichenoid reaction is considered a possibility. Definitive diagnosis requires a biopsy and is most suitably performed by an oral physician. Few hospitals have access to a Department of Oral Medicine and should this be the case a suitable alternative opinion should be sought from either the oral and maxillofacial surgeons or the dermatologists.

Where lichen planus is asymptomatic and a chance finding, management may merely involve confirmation of the diagnosis and reassurance of the patient. In others with symptoms, advice to avoid highly spiced foods and to use a nonflavoured toothpaste may be beneficial. Candidiasis should be considered and treated with topical antifungal agents if present. Topical steroid applications, eg, triam-

cinolone in Orabase or betamethasone mouthwash are used to reduce inflammation. Tetracycline mouthwash may be useful in the management of erosive lesions. Experience suggests that lesions with an atrophic nature are the most likely to undergo malignant transformation and should be closely monitored.

Keywords: lichen planus; alopecia; oral lesions

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A complication of intensive care

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A 44-year-old woman with non-insulin-dependent diabetes mellitus presented with severe respiratory distress secondary to a suspected pulmonary embolus. She required immediate intubation, thrombolysis was administered and she was transferred to the Intensive Care Unit for ventilatory and inotropic support. A ventilation perfusion scan confirmed ventilation perfusion mismatch and she was subsequently anticoagulated. She appeared to be making an uneventful recovery until 7 days later when she developed a temperature. An abnormality of her right eye was noted and on ophthalmological review visual acuity was 6/36; funduscopy revealed multiple choroidal lesions.

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Figure

Questions

- 1 What is the abnormality seen in the right eye ?
- 2 What are the possible causes ?
- 3 What investigations were undertaken to confirm the diagnosis ?
- 4 How was this condition managed ?