## Clinical case review

# A 33-year-old woman with sore red lips

Commentary by SUSI FREEMAN MB BS, DDM, FACD

A young woman presents with a history of sore lips that are dry and sometimes very flaky. What can be done for her?

### Case scenario

A healthy 33-year-old woman presents with a three-month history of dry, sore, red and sometimes very flaky lips. She is allergic only to penicillin, takes no medications, and reports no recent changes in diet or cosmetic use. She regularly uses various lipbalms containing sunscreens and wonders if these are exacerbating the problem, although she has used these for many years. She has rarely worn lipstick since the problem began. On examination, the lips are swollen and erythematous, which extend beyond the outer margin (Figure).

Marked improvement occurs with use of an antibiotic and corticosteroid ointment, but the problem returns within days of ceasing treatment. Is allergy to a lipbalm component likely? How should I proceed?

### **Commentary**

Dermatitis of the lips (cheilitis) is a common condition for which there are many causes. The following factors must be considered in this patient:

- Is there a personal history or a family history of eczema, asthma or hayfever? If so, she would usually be clinically defined as an atopic individual, and atopic eczema can be limited to the lips.
- Does she have a habit of licking her lips? This is a common problem in people who have dry lips. Frequent licking can cause an irritant contact dermatitis due to the enzymes present in saliva.



Figure. The patient's sore lips at initial presentation.

- Is the cheilitis worse on sun exposure? Sunscreen agents in most lipbalms can cause photo contact dermatitis.
- Is there a relationship with dental treatment? Chemicals used by dentists can be allergens.
- Is there a relationship with certain foods? Antioxidants and preservatives in some foods have been found to cause cheilitis.
- Does she use a toothpaste that contains mint? Toothpaste flavours are known contact allergens.

In any case, this patient requires patch testing and photo patch testing in order to exclude the possibility of allergic contact dermatitis. This should be carried out by a dermatologist with the standard patch test series, the sunscreen series, the toothpaste flavours, and the antimicrobials and preservatives series, as well as with all her lipbalms. Even corticosteroids can be contact allergens and should be patch tested. Most of these patch test allergens will only be available in specialist patch test clinics.

In a series of 75 cases of recalcitrant cheilitis referred to the Contact and Occupational Dermatitis Clinic at the Skin & Cancer Foundation in Sydney, a variety of allergens were identified. These included medicaments applied to the lips, lipsticks, sunscreen agents, toothpaste ingredients and nail varnish (caused by the habit of running the varnished fingernail along the lips). There was even one patient who was allergic to the nickel mouthpiece in a silver flute.

### Reference

1. Freeman S, Stephens R. Cheilitis: analysis of 75 cases referred to a contact dermatitis clinic. Am J Contact Dermat 1999; 10: 198-200.

**DECLARATION OF INTEREST: None.** 

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