

An uncontrollable cutaneous herpes simplex infection

Commentary by **DAVID W. SMITH** BMedSc, MB BS, FRCPA

A 17-year-old girl presented with two cold sores, which later spread to the eye, with a bacterial superinfection.

What could have been done to shorten the course of her illness, and does she need any immunological assessment?

Case scenario

A usually well 17-year-old schoolgirl had a cold sore on her right upper lip for two days (where she had previously had such lesions). When a second sore appeared at the junction of the right anterior nares and cheek, she presented to me. I was concerned that the virus was spreading, so advised antiviral cream five times daily. She returned 48 hours later; the two lesions had extended and coalesced, and her ipsilateral eye was watering. An urgent ophthalmological review excluded corneal involvement, but antiviral ophthalmic ointment was prescribed. I started her on oral systemic antiviral therapy.

When I reviewed her the next day, the weeping and now excoriated rash had extended. I referred her to hospital, where she was diagnosed and treated for herpes simplex virus infection with bacterial superinfection. She recovered fully.

Could I have done anything differently to shorten the course of this girl's illness, and does she need any immunological assessment?

Commentary

The facial herpes in this patient is certainly at the more severe end of the scale but does not, in itself, indicate an underlying immunological disorder. If she has no other clinical evidence of recurrent infections, does not get frequently recurring cold sores and is otherwise well, then further investigation is very unlikely to yield anything.

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PHOTOGRAPH COURTESY OF DR MAUREEN ROGERS, SYDNEY, NSW

A case of primary facial herpes simplex in a different patient from the one in this scenario. Recurrent infection is rarely as severe as shown here, but may appear at multiple sites on the face, including periorcularly, and may be complicated by bacterial superinfection.

General management

Generally, the management of a single cold sore is symptomatic, with the emphasis on cleanliness to avoid superinfection. This can usually be achieved with simple measures such as saline washes. In order to prevent autoinoculation, patients need to be fastidious about avoiding touching the lesions, washing their hands if they do touch them, and ensuring that contaminated fingers or objects (such as tissues) do not come in contact with other body areas, especially the eye. They should also refrain from kissing and from orogenital sex, and should avoid close contact with young children.

Routine specific treatment of uncomplicated mild to moderate facial herpes is not necessary. Simple alcohol-based substances, such as surgical spirits, perfume or after-shave, will dry up the lesions and can be used provided that they do not cause irritation.

There is a wide variety of over-the-counter preparations for cold sores, some of which contain drying agents or a local anaesthetic, while others, such as tea tree oil, may have specific antiviral properties. Patients may get some reduction of symptoms and up to one-day shortening of the duration of lesions – although individual experience can be better or worse than this.

Antiviral therapy

Aciclovir 5% cream (Acihexal Cream, Chemist's Own, Zolaten, Zovirax Cold Sore Cream) – as distinct from the ointment – does have some clinical efficacy in trials and does reduce symptoms, but it shortens healing time by only 10 to 15% (half to one day). The efficacy will vary from patient to patient, with the promptness of commencement and with the severity of the

lesions. The ointment is not useful for treatment of skin lesions.

Oral antiviral therapy is more effective than topical therapy; one to two days of oral treatment will reduce symptoms and shorten the illness by 20 to 30% and is particularly good for stopping new lesion formation. Therefore, in cases such as this where there is extension towards the eye, oral therapy is the preferred option, provided the patient can afford it.

Once periocular lesions are present, I would definitely advocate oral antiviral therapy. The doses required are high – valacyclovir (Valtrex) 1 to 2 g twice daily, famciclovir (Famvir) 500 mg three times daily or aciclovir 400 mg five times daily – although two days of therapy may suffice.

Oral antiviral therapy is best commenced as early as possible, but it is difficult to predict which patients will get extension of their lesions. Therefore, oral antivirals are normally reserved for those with a previous history of severe disease or where the lesions are already extending. They are much more effective when used prophylactically to prevent frequently recurring cold sores than they are for treatment of active lesions. If oral therapy is not possible, aciclovir 3% ophthalmic ointment (Zovirax Ophthalmic Ointment), as prescribed by the ophthalmologist, should offer some protection against

infection of the eye. Ophthalmological review is wise whenever corneal involvement is possible (although it is uncommon).

Bacterial superinfection

Bacterial superinfection of cold sores is uncommon provided basic hygiene is observed. It should be suspected if:

- pustular areas develop
- there is a spreading erythematous edge without blisters
- the characteristic crusting of impetigo is present
- the patient becomes systemically unwell.

Antibiotics active against staphylococci and streptococci, such as flucloxacillin, dicloxacillin or cephalixin, should be used.

Reducing further episodes

The patient should be given general advice about avoidance of excessive sunlight (UV) or wind exposure, to reduce the risk of further cold sores.

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Further reading

1. Spruance SL, Kriesel JD. Treatment of herpes simplex labialis. *Herpes* 2002; 9: 64-69 ([http://www.ihmf.org/journal/download/93Spruance\(64\)vol964.pdf](http://www.ihmf.org/journal/download/93Spruance(64)vol964.pdf))