Identifying and treating a florid vesicular rash

A 56-year-old man presented to the dermatology department with a two-month history of an itchy rash with widespread vesicular erythematous plaques and some bullae. The patient had a past medical history of squamous cell lung cancer, which was in remission, and had been diagnosed with epidermolysis bullosa simplex (EBS, a genetically acquired blistering condition) as a child. His EBS had manifested itself with minor blistering at sites of trauma, such as the heels and elbows. His medications were ramipril 5mg once daily and simvastatin 40mg once nightly. There were no known drug allergies.

The diagnosis was initially unclear, with a working differential of either discoid eczema or an immunobullous disorder such as linear IgA disease. A biopsy was performed, with tissue samples sent for histology and immunofluorescence. While awaiting the results, the patient was given a tapering course of oral prednisolone, beginning at 40mg once daily. The biopsy suggested an eczematous picture, with a blistering pattern consistent with EBS. Immunofluorescence was negative. Correlating the histological findings with the clinical presentation, the diagnosis of discoid eczema complicated by EBS blistering was made.

After a month of oral prednisolone on a tapering regimen, he remained on 5mg prednisolone once daily for two to three weeks, with a super potent topical steroid ointment (clobetasol propionate 0.05 per cent) on the itchy red areas once daily for 10–14 day bursts as needed. He was advised to use soap substitutes and emollients to maintain the integrity of the skin barrier and was given open follow up.

Discoid (nummular) eczema presents usually in middle age and is characterised by itchy coin-shaped lesions with a well-demarcated border.1 Unlike dermatophyte infections, with which it may be confused, the rash does not tend to be annular, lacking a central clearing. Psoriasis is among the differential diagnoses, but tends to be less itchy and has loose silver scale, rather than adherent crust. Psoriasis may also be associated with nail, scalp or joint changes. Discoid eczema can be very florid, with livid erythema, vesicles, crusting and oozing.1 For this reason it can be mistaken for cellulitis or severe impetigo, leading to treatment with oral antibiotics. However, although the eczema may become superinfected, it will not resolve with antibiotics alone, and requires potent topical steroids in addition.2 Over time the lesions tend to become dry and scaly.1 There may be multiple lesions visible at different stages of evolution.
Discoid eczema is usually endogenous in aetiology, although patients will often seek an allergic cause. However, as with other forms of eczema, patch tests will be positive in a minority, and relevant in some. Swabs for microscopy, culture and sensitivity (MC&S) will help direct anti-microbial therapy if needed; nasal swabs may identify staphylococcal carriage, which can be the source of infection. If the diagnosis is in doubt, skin scrapings for mycology should be taken and a biopsy considered. The advice of a dermatologist should be sought if there is diagnostic uncertainty or resistant disease.

As with any eczema, irritant avoidance (including the use of soap substitutes) and barrier repair with emollients, is important. To maximise adherence, patients should be given the choice of the emollient they wish to use. The key treatment is with potent topical corticosteroids (see Table 1). Mild and moderate potency topical steroids do not tend to be effective in discoid eczema. As with all topical corticosteroids, patients should receive counselling regarding side-effects and appropriate application doses (in terms of fingertip units).

Steroid/antibiotic combination creams can be helpful in discoid eczema that is frequently infected, eg betamethasone valerate 0.1 per cent plus fusidic acid 2 per cent (Fucibet), but care should be taken in areas of fusidic acid resistance. Recalcitrant disease may require systemic therapy with oral prednisolone followed by a steroid-sparing immunosuppressant, such as azathioprine. Antihistamines can be prescribed to help reduce the itch, although in practice they are rarely effective. If there are signs of cellulitis or lymphangitis the patient should be treated with oral antibiotics according to local formulary guidelines (see note above regarding MC&S). If the history suggests possible contact allergy then the patient should be referred for patch testing.

**Table 1. Steroids for use in discoid eczema in adults**

<table>
<thead>
<tr>
<th>Strength</th>
<th>Drug</th>
<th>Price</th>
<th>Dose</th>
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<tbody>
<tr>
<td>Potent</td>
<td>Beclometasone dipropionate 0.025%</td>
<td>30g tube costs £68.00 (cream and ointment)</td>
<td>Thin application once to twice daily, 7 days</td>
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<tr>
<td></td>
<td>Betamethasone valerate 0.1%</td>
<td>30g tube costs £1.43 (cream and ointment)</td>
<td>Thin application once to twice daily, 7 days</td>
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<tr>
<td></td>
<td>Hydrocortisone butyrate 0.1%</td>
<td>30g tube costs £1.60 (cream)</td>
<td>Thin application once to twice daily, 7 days</td>
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<tr>
<td>Potent with antimicrobials</td>
<td>Betamethasone as valerate 0.1%/fusidic acid 2%</td>
<td>30g tube costs £6.38 (Fucibet cream)</td>
<td>Thin application once daily, 7 days</td>
</tr>
<tr>
<td>Very potent</td>
<td>Clobetasol propionate 0.05% (Dermovate)</td>
<td>30g tube costs £2.69 (cream and ointment)</td>
<td>Thin application once to twice daily, 7 days. Max 50g/week</td>
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References


Declaration of interests

None to declare.

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