

Allergic contact dermatitis due to clobetasol propionate and lanoconazole

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Allergic contact dermatitis due to lanoconazole¹⁻³ is relatively common, whereas contact allergy due to clobetasol propionate⁴⁻⁷ is rare. Here, we report the first case of concomitant contact dermatitis due to the simultaneous use of lanoconazole and clobetasol propionate.

CASE REPORT

A 63-year-old man developed itchy erythema on the occipital region 2 months earlier and was initially prescribed 2% ketoconazole and 0.05% clobetasol propionate creams by a local dermatologist. Ten days before consultation at our clinic, the dermatologist changed the patient's prescription to 1% lanoconazole cream for the scalp and neck, and 0.05% clobetasol propionate ointment for the scalp and trunk. However, the skin eruptions worsened and the patient was referred to us. On physical examination, severe scaly erythema was noted on his scalp, face, and neck, and erythema on his trunk, arms, and legs

(Figure 1). We started topical application of 0.05% betamethasone butyrate propionate ointment on his scalp, trunk, and extremities, and 0.1% diflucortolone valerate ointment on his face and neck, along with oral prednisolone at the initial dose of 20 mg/day, which was later tapered. All the skin eruptions and symptoms resolved within 28 days.

The first patch test included all the topical preparations the patient used. Positive reactions were noted with 1% lanoconazole cream "as is" and 0.05% clobetasol propionate ointment "as is" (Table S1). The second patch test included the ingredients of the 1% lanoconazole cream and 0.05% clobetasol propionate ointment. Positive reactions were noted with lanoconazole 1% pet. and 0.1% pet., and clobetasol propionate 0.25% pet. (Table S1). Therefore, we diagnosed the patient with contact dermatitis due to concomitant contact allergy to lanoconazole and clobetasol propionate.

We also performed a patch test including other topical antifungal medications and topical corticosteroids to investigate possible cross-reactions. A positive reaction was noted with 1% luliconazole cream, but negative



FIGURE 1 Severe scaly erythema on the scalp and neck, and erythema on the trunk and arms

reactions were noted with 2% ketoconazole cream, 1% terbinafine hydrochloride cream, and 1% miconazole nitrate cream. Moreover, negative reactions were noted for all other topical corticosteroids (Table S1).

DISCUSSION

Clobetasol propionate ointment is classified as having the strongest anti-inflammatory potency, and allergic contact dermatitis to it is considered rare.^{4–7} The patient was advised to apply the ointment only on the scalp and trunk; however, he had also applied it on the face and the front of the neck, thereby causing the eruptions to spread. The dermatitis worsened because the patient was allergic to lanoconazole cream. Nevertheless, it was unclear whether the patient had been previously sensitized to lanoconazole, since we were unable to obtain his detailed history of topical medication use. Allergic contact dermatitis due to clobetasol propionate may be rare but can be a pitfall for practicing dermatologists.

DISCLOSURE OF INTERESTS

None to declare.

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SUPPORTING INFORMATION

Additional supporting information may be found online in the Supporting Information section at the end of this article.

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Online supplemental Table 1. Patch test results

Material	Percentage/vehicle	D2	D3	D7
1% Lanconazole cream	“as is”	+	++	+
Lanconazole	0.1% pet.	++	++	+
Lanconazole	1% pet.	++	++	+
Other 9 ingredients		–	–	–
0.05% Clobetasol propionate ointment	“as is”	+	+	+
Clobetasol propionate	0.25% pet.	+	+	–
Other 2 ingredients		–	–	–
1% Luliconazole cream	“as is”	++	++	+
2% Ketoconazole cream	“as is”	–	–	–
1% Terbinafine hydrochloride cream	“as is”	–	–	–
1% Miconazole nitrate cream				
0.05% Clobetasone butyrate ointment	“as is”	–	–	–
0.1% Alclometasone dipropionate ointment	“as is”	–	–	–
0.1% Hydrocortisone butylate ointment	“as is”	–	–	–
0.3% Prednisolone valerate aetate ointment	“as is”	–	–	–
0.12% Dexamethasone valerate ointment	“as is”	–	–	–
0.12% Betamethasone valerate ointment	“as is”	–	–	–
0.1% Diflucortolone valerate ointment	“as is”	–	–	–
0.05% Betamethasone butyrate propionate ointment	“as is”	–	–	–
0.05% Difluprednate ointment	“as is”	–	–	–