

Short Communication

Allergic contact dermatitis due to dorzolamide eyedrops

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Dorzolamide is the 1st commercially-available topical carbonic anhydrase inhibitor (CAI) for the treatment of glaucoma. As far as we know, there has been only 1 previous report of contact dermatitis due to it (1).

Case Report

A 61-year-old man presented with a 6-week history of eyelid dermatitis. He had a 10-year history of glaucoma and had started using topical timolol, latanoprost and dorzolamide hydrochloride (Trusopt[®], 1%) 5 months previously. He complained that his dermatitis was exacerbated after instilling Trusopt[®] eyedrops and, when Trusopt[®] was discontinued, his eyelid dermatitis cleared within 1 week.

Patch tests were performed with Trusopt[®] eyedrops (as is) and its active ingredients, including dorzolamide hydrochloride, hydroxyethyl cellulose, D-mannitol and benzalkonium chloride, on both normal and tape-stripped skin, backskin being stripped 20× with Transpore[®] tape. Positive reactions were obtained to dorzolamide 10 to 5% aq. and 10 to 15% pet. only at the tape-stripped site (Table 1). The patient did not react to Trusopt[®] 1% (as is), hydroxyethyl cellulose, D-mannitol, benzalkonium chloride, timolol eyedrops, or latanoprost eyedrops. Patch testing in 5 healthy subjects was negative.

Discussion

Trusopt[®] eyedrops have been available since May 1999 in Japan and, to our knowledge, this is the 1st Japanese case of contact dermatitis due to dorzolamide confirmed by patch tests. In the present case, stripping the horny

Table 1. Results of patch tests with dorzolamide hydrochloride

	Normal skin		Stripped skin*	
	D*	D2	D2	D3
aq.				
10%	—	—	—	++
5%	—	—	—	++
1%	—	—	—	?+
0.5%	—	—	—	—
0.1%	—	—	—	—
0.05%	—	—	—	—
0.01%	—	—	—	—
pet.				
10%	—	—	+	++
5%	—	—	—	+
1%	—	—	—	?+
0.5%	—	—	—	—
0.1%	—	—	—	—
0.05%	—	—	—	—
0.01%	—	—	—	—
Trusopt [®] eyedrops				
1% as is	—	—	—	—

* The patch test site was stripped with Transpore[®] tape.

layer of skin prior to patch testing contributed to eliciting the reaction to the test agent (2).

References

1. Alto-Korte K. Contact allergy to dorzolamide eyedrops. *Contact Dermatitis* 1998; 39: 206.
2. Willis I, Kligman A M. Diagnosis of photosensitization reactions by the Scotch[®] tape provocative patch test. *J Invest Dermatol* 1968; 51: 116–119.