

Allergic Contact Dermatitis from a Veterinary Antiinflammatory Gel Containing 2-Hydroxyethyl Salicylate

To the Editor:

A 64-year-old man with cervical pain applied Tensolvat gel (Esteve, Barcelona, Spain) at the recommendation of his son. Tensolvat gel is a veterinary product containing 2-hydroxyethyl salicylate, menthol, and heparin sodium. It is indicated for the treatment of musculoskeletal inflammation in horses. After 2 weeks, the man developed a pruritic erythematous vesicular eruption at the site of application on the left shoulder and neck. He was treated with topical and systemic corticosteroids, and the cutaneous lesions resolved completely within 7 days.

Patch tests were undertaken with the Spanish Group for the Investigation of Contact Dermatitis (GEIDC) standard series, an antiinflammatory series, and Tensolvat gel and its components (provided by the manufacturer). Positive reactions to nickel sulfate, potassium dichromate, Tensolvat gel, and 2-hydroxyethyl salicylate were observed at day 4 and day 7 (Table 1). We patch-tested with heparin sodium, scarifying the skin with a sterile prick lancet (scratch patch test). Scratch patch tests were performed with heparin sodium at various concentrations in water and petrolatum, with negative results (Table 2). Results of patch tests with 2-hydroxyethyl salicylate 5% in petrolatum were negative in 15 controls.

Topical nonsteroidal antiinflammatory drugs are a well-known cause of allergic and photoallergic contact dermatitis. Arylpropionic acid derivatives (mainly ketoprofen) are responsible for the great majority of cases. Although salicylates are widely used in many topical analgesics in Europe and the United States, 2-hydroxyethyl salicylate is considered to be a rare sensitizer. To date, only two cases of allergic contact dermatitis from 2-hydroxyethyl salicylate have been reported: a man with osteochondritis dissecans of

the right talotibial joint who developed an acute contact dermatitis after the application of an antiinflammatory gel,¹ and a woman with chronic venous insufficiency after the application of several antirheumatic and antiinflammatory gels and creams containing 2-hydroxyethyl salicylate and heparin sodium.² Contact allergies to other salicylates also seem to be rare.^{3,4}

Closed patch tests may be inadequate for high-molecular-weight allergens, which penetrate poorly through the intact epidermis. Scratch patch testing is performed as classic patch testing to facilitate penetration in an area where the epidermis has been damaged mechanically.⁵ Because of the high molecular weight of heparin sodium and the possibility of a false-negative patch-test result,⁵ we performed scratch patch tests with heparin sodium, with negative results.

We report the first case of allergic contact dermatitis from 2-hydroxyethyl salicylate in Spain. There is currently no product containing 2-hydroxyethyl salicylate marketed for human use in Spain that is not included in the antiinflammatory series we used for testing.

In this case, it was especially important to have the patient's own product to use in patch testing and in reaching the diagnosis. We want to highlight the misuse of

Table 1. Patch-Test Reactions to Tensolvat Gel

Allergen	Concentration and Vehicle	D2	D4	D7
Tensolvat gel	As is	—	++	++
Heparin sodium	0.05% aq	—	—	—
	0.1% aq	—	—	—
	1% aq	—	—	—
	2% aq	—	—	—
	5% aq	—	—	—
	0.01% pet	—	—	—
	0.5% pet	—	—	—
	1% pet	—	—	—
	2% pet	—	—	—
	5% pet	—	—	—
2-Hydroxyethyl salicylate	1% pet	—	+/-	+
	2% pet	—	+	++
	5% pet	—	+	++
Menthol	1% pet	—	—	—
Propylene glycol	20% aq	—	—	—
Triethanolamine	2.5% pet	—	—	—

aq = aqueous; D = day; pet = petrolatum.

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Table 2. Scratch Patch-Test Reactions to Heparin Sodium

Concentration and Vehicle	D2	D4	D7
0.05% aq	—	—	—
0.1% aq	—	—	—
1% aq	—	—	—
2% aq	—	—	—
5% aq	—	—	—
0.01% pet	—	—	—
0.5% pet	—	—	—
1% pet	—	—	—
2% pet	—	—	—
5% pet	—	—	—

aq = aqueous; D = day; pet = petrolatum.

a veterinary product responsible for allergic contact dermatitis from 2-hydroxyethyl salicylate.

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