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Abstract:
Thrombocid® ointment (Lacer, Barcelona, Spain) is widely used in Spain and other countries for varicose veins and 22 hematomas. To our knowledge, there are no reported cases of allergic contact dermatitis following its use. Herein we present 23 two cases of allergic contact dermatitis to Thrombocid® ointment, owing to cetearyl alcohol.

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Letter

Allergic contact dermatitis from cetearyl alcohol in Thrombocid® ointment

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ABSTRACT

Thrombocid® ointment (Lacer, Barcelona, Spain) is widely used in Spain and other countries for varicose veins and hematomas. To our knowledge, there are no reported cases of allergic contact dermatitis following its use. Herein we present two cases of allergic contact dermatitis to Thrombocid® ointment, owing to cetearyl alcohol.

INTRODUCTION

Thrombocid® ointment (Lacer, Barcelona, Spain) is widely used in Spain and other countries for varicose veins and hematomas[1]. The active ingredient in the commercial ointment is pentosan sodium polyphosphate and the additional ingredients are detailed in Table 1. To our knowledge, there are no reported cases of allergic contact dermatitis (ACD) following its use. Herein we present two cases of allergic contact dermatitis to Thrombocid® ointment.

CASE SYNOPSIS

Case 1 is a 75-year-old woman who suffered repeated episodes of eczematous dermatitis on the dorsa and lateral sides of her feet over the previous year. She used Thrombocid® ointment to treat one of these outbreaks. She developed erythema and blistering in all areas where she had applied the ointment twenty-four hours after the first application. She stopped Thrombocid® application and lesions resolved in a week.

Patch tests were performed with the basal series of the *Spanish Contact Dermatitis and Skin Allergy Research Group* (GEIDAC) and a preservatives/cosmetics series (Marti-Tor, Barcelona, Spain). Positive reactions were obtained at D3 for mercury (++), potassium dichromate (++), caine mix (++), clioquinol (+), and cetearyl alcohol (+). Potassium dichromate was also considered relevant to her foot dermatitis.

Case 2 is an 82-year-old woman with chronic lower leg edema and venous insufficiency who presented with pruritic scaly erythematous plaques of the lower limbs after the application of Thrombocid® ointment. Lesions resolved after discontinuing its application. Patch tests were performed with the basal series of the GEIDAC and fragrance series. On D4 these revealed positivity to fragrance mix-I (++) and oak moss (++).

Thrombocid® ointment as is and its ingredients –provided by the manufacturing laboratory– were tested on both patients (Table 1), with positivity to Thrombocid® ointment (++), cetearyl alcohol (++), and emulgade F (++), which also contains cetearyl alcohol. Controls were performed in 18 patients and were all negative.

Table 1. Patch testing with the ingredients of Thrombocid® ointment

Compound	*Concentration and vehicle**
Pentosan sodium polyphosphate	0.1% pet
Ethylparaben	4% pet
Cetearyl alcohol	20% pet
Propilenglycol	5% pet
Propilenglycol	20% aq.
Emulgade F**	20% pet
Emulgade F**	As is
Thymol	1% pet
Sorbitol	2% pet
Guayazulene	1% pet
Sorbic acid	2% pet
Decyl oleate	5% pet
*Concentrations and vehicles were based on previously published data **Emulgade F is a mixture of cetearyl alcohol, PEG-40 castor oil, and sodium cetearyl sulphate	

DISCUSSION

Allergic contact dermatitis to Thrombocid® ointment has not been reported previously, and there is only one reported case of cutaneous adverse reaction manifested as contact urticarial [1]. Herein we present two patients with ACD to Thrombocid® ointment, owing to cetearyl alcohol. Cetearyl alcohol (or cetostearyl alcohol) is a combination of cetyl and stearyl alcohol present in many topical medicaments and cosmetics in which it acts as an emulsifier and stabilizer [2]. This is an uncommon cause of ACD (Table 2).

Table 2. Reported cases of allergic contact dermatitis to cetearyl alcohol

Silver sulfadiazine cream[6].
Hirudoid cream[7].
Topical corticosteroids creams[8].
Emollients[4,8].
Burnol-plus cream[9].
Efudix cream[10].
Mentholatum AD ointment[2].
Benadryl cream[4].
Doxepin cream[4].
Cetaphil cleanser[4].
Rubber glove coated with a moisturizer [11].
Thrombocid (presented cases)

This low frequency of allergy to cetearyl alcohol despite its widespread use relates to its limited ability to penetrate intact skin [2]. In this manner, cetearyl alcohol bears some resemblance to the classical “paradoxical allergens”, e.g. lanolin and parabens, which are usually tolerated by sensitized patients when applied on intact skin [3]. Thereby ACD to cetearyl alcohol is almost always associated with a previous alteration of the skin barrier that facilitates its absorption [2,4]. In fact, it is a relatively frequent allergen in series of patients with chronic venous insufficiency and leg ulcers [5]. In our first case, the predisposing condition was shoe dermatitis from potassium dichromate. In case 2 it was edema from venous insufficiency and stasis dermatitis. We believe that both patients were probably sensitized to cetearyl alcohol from previous contact with emollients and/or topical corticosteroid creams containing the allergen.

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