

A Case of Allergic Contact Dermatitis to Cenaser[®] Vaginal Suppository

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Sensitization to Cenaser[®], a broad spectrum antimicrobial for the treatment of leukorrhea, is rare. Perineal contact dermatitis due to vaginal suppositories has never been reported in the medical literature. We report a 31-year-old woman, who developed perineal skin eruptions following the treatment of leukorrhea with Cenaser[®] vaginal suppositories. Patch tests showed positive reactions to Cenaser[®] suppositories and to the three active ingredients of Cenaser[®]. Vaginal suppositories can sensitize not only the vagina but also the surrounding perineum due to leakage of the allergen from the vaginal vault.

(Ann Dermatol 3:(2) 130-132, 1991)

Key Words : Allergic contact dermatitis, Cenaser[®], Vaginal suppository

Cenaser[®] (Central pharmaceutical Co., U.S.A.)¹⁾ is a broad spectrum antimicrobial composed of 9-aminoacridine undecylenate (AAU), N-myristyl-3-hydroxybutylamine hydrochloride (MHH) and methyl benzethonium chloride (MBC), used for leukorrhea in the form of a vaginal suppository. The three active ingredients of the suppository have rarely been reported as sensitizers.

We describe a case of allergic contact dermatitis on perineal skin following the use of Cenaser[®] vaginal suppositories.

REPORT OF A CASE

A 31-year-old woman developed pruritic, well-demarcated, erythematous, edematous and

indurated patches on her perineum and buttocks following 7 day treatment of leukorrhea with Cenaser[®] vaginal suppositories. The skin lesions occurred on the seventh day of use. Past medical and family histories were unremarkable. Routine laboratory tests were within normal limits. Histologic examination of skin biopsy showed mild dermal perivascular infiltration of mononuclear cells and neutrophils with little epidermal changes. Allergic contact dermatitis to Cenaser[®] was suspected. Patch tests were performed with water and ethanol extractable Cenaser[®] and other vaginal suppositories. The sites tested with Cenaser[®] showed strong positive reaction (Table 1). Additional patch tests with the active ingredients were performed on the patient and six normal controls. The minimum concentrations of AAU, MHH and MBC to elicit positive reactions in the patient were 0.2%, 0.002% and 0.1%, respectively (Table 2). A few normal controls showed trace reactions at the higher concentra-

Received February 2, 1991

Accepted for publication March 20, 1991

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Table 1. The day 3 results of patch test with vaginal tablet as is

	Cenasert [®]	Gyno-Pevaryl [®]	Canesten-1 [®]
as is	++	—	—
in water			
as is	++	—	—
in ethanol			

Gyno-Pevaryl[®] : econazole nitrateCanesten-1[®] : clotrimazole**Table 2.** The results of patch tests with ingredients in a patient

		AAU		MHH		MBC		SA	
		D2	D4	D2	D4	D2	D4	D2	D4
as is		++	+	+++	++	++	++	—	—
10%	oint	+	+	++	++	+	+	—	—
10%	aq					++	+		
2%	aq	+	+	+++	++				
1%	aq					+	+		
0.2%	aq	+	+	++	+				
0.1%	aq					+	+		
0.02%	aq	—	—						
0.01%	aq			+	+	—	—		
0.002%	aq	—	—						

AAU : 9-aminoacridine undecylenate

MHH : N-myristyl-3-hydroxybutylamine hydrochloride

MBC : methyl benzethonium chloride

SA : succinic acid

D2 : patch test reading after 2 days

D4 : patch test reading after 4 days

Table 3. The results of patch tests with ingredients in six normal controls

		AAU		MHH		MBC	
		D2	D4	D2	D4	D2	D4
10%	oint	±(1)*	—				
2%	aq	±(1)*	—				
1%	aq	—	—			—	±(1)*
0.2%	aq						
0.1%	aq					—	—
0.02%	aq			±(2)*	—		
0.002%	aq			—	—		

* Number of controls who reacted to patch tests

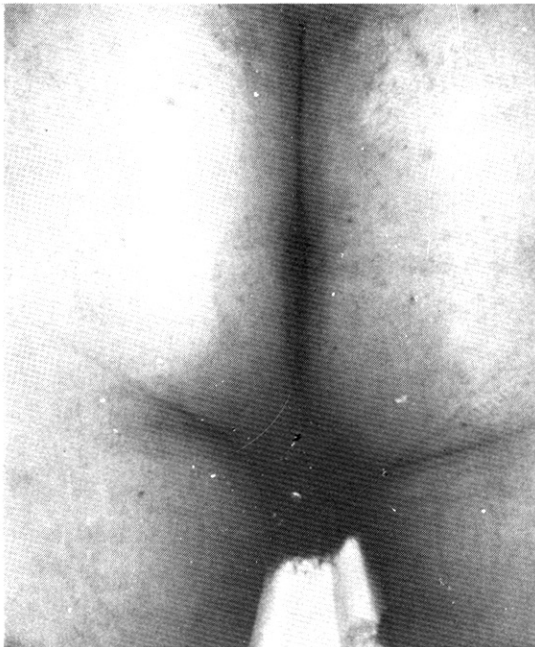


Fig. 1. Erythematous patches on the perianal area.

tions (Table 3).

DISCUSSION

Leukorrhea is often treated with broad spectrum antimicrobials such as Cenaser[®] which is known to cover trichomoniasis, candidiasis and non-specific bacterial infections. Cenaser[®] is composed of two antimicrobials, MHH and MBC, one antifungal, AAU and succinic acid (SA). Their concentrations are 0.1%, 0.1%, 0.18% and 1.25%, respectively.¹

In formulating the patch test, undecylenic acid 2.5% in petrolatum, and benzethonium chloride 0.1% in water, are recommended. From the results of our control study⁵, appropriate concentrations were considered to be 1% for AAU, 0.002% for MHH and 0.1% for MBC (Table 3). Although our patient showed positive reaction to all three ingredients, the possi-

bility of the angry back reaction probably by MHH could not be excluded.

Our case demonstrated that vaginal suppository could elicit allergic contact dermatitis. It is conceivable that the sensitization had occurred through vaginal mucosa as well as adjacent skin although mucous membranes are less commonly sensitized.⁶ We suspect perivulvar dermatitis related to vaginal suppositories is more common than reported. A case of generalized allergic dermatitis to intrauterine contraceptive device has been previously described.⁷

In the case of perineal eczema of unknown origin, vaginal suppositories should be considered as a possible etiology.

REFERENCES

1. Price KC, Wissner SE : *The management of vaginitis-report of therapeutic trial of a new combination of agents.* J Kansas Med Society Oct : 422-423, 1962.
2. De Groot AC : *Patch Testing.* Elsevier Science Publishers B.V, Amsterdam, 1986.
3. Cronin E : *Preservatives and antibacterials.* In *Contact dermatitis*, Churchill Livingstone, Edinburgh London, 1980, pp 664-714.
4. Fisher AA : *Antiseptics and disinfectants.* In *Contact dermatitis.* 3rd ed, Lea & Febiger, Philadelphia, 1988, pp 178-195.
5. Larsen WG, Maibach HI : *Contact dermatitis.* In *Moschella SL, Pillsbury DM, Hurley HJ(eds) : Dermatology.* 2nd ed, WB Saunders Co, Philadelphia, 1985, pp 312-313.
6. Fisher AA : *Contact stomatitis and cheilitis.* In *Contact dermatitis.* 3rd ed, Lea & Febiger, Philadelphia, 1986, pp 773-774.
7. Barranco VP : *External dermatitis caused by internal exposure to copper.* Arch Dermatol 106:386-389, 1972.