

Short Communications

Fixed drug eruption due to acyclovir

J. MONTORO AND A. BASOMBA

Servicio de Alergia, Hospital Universitario La Fe, Avda. Campanar 21, 46009 Valencia, Spain

Key words: acyclovir; fixed drug eruption; drug allergy; positive lesional patch test. © Munksgaard, 1997.

Case Report

A 56-year-old woman complained of a hyperpigmented macule on her left ankle. She had no history of previous diseases, drug allergies or atopy.

In August 1995, she presented with a herpes virus infection on her lips. She was treated at first with topical acyclovir without improvement. Then, oral acyclovir was administered. 2 h after she had taken the 3rd tablet, she felt intense pruritus on her left ankle. 1 h later, an erythematous vesicular lesion developed at this site. It was successfully treated with systemic corticosteroids and topical iodide solution, for 10 days, but a hyperpigmented geographic macule persisted.

1 month later, herpes virus infection on the patient's lips recurred and she was treated with topical acyclovir. On the 3rd day, this treatment was suspended because of local herpes virus infection impairment. Oral acyclovir was then readministered, and 2 h after the 2nd tablet, the patient once again experienced the same symptoms at the same site, though this time even more intensely. Acyclovir was withdrawn and corticosteroids and iodide solution were administered. Symptoms improved during the next 9 days, although a more extensive fixed eruption persisted. During the 2 episodes, she had not taken any other drug. Signs or symptoms of systemic disease were not found. Previously, she had occasionally been treated with topical acyclovir without adverse effects.

Patch tests were performed on both the fixed eruption and normal skin, with Zovirax[®] cream and its constituents. Readings were performed at 1 and 2 days. The results are shown in Table 1. Patch tests with the European standard series were negative. The patient began to experience intense pruritus 18 h after patch test application. At D1, patch tests were removed. As shown in Table 1, the patch test with Zovirax[®] cream and acyclovir 5% pet. reproduced the same symptoms that oc-

curred with oral administration of acyclovir, but only on the fixed eruption.

Discussion

Acyclovir is a structural nucleoside analogue of guanosine, which inhibits viral DNA-polymerase and is used in HSV, VZV and EBV infections (1), topically, orally and intravenously. Topical use has caused contact dermatitis (2-5), and intravenous administration high serum levels of creatinine and urea, local inflammation and phlebitis (6, 7), local tissue necrosis due to extravasation (8), vesicular eruptions at the catheter infusion route (9), hepatotoxicity, neurotoxicity and bone marrow suppression (6, 7).

Our results strongly suggest that this case can be considered as a fixed drug eruption due to acyclovir, in which the route of sensitization was probably topical. Nevertheless, the patient experienced definite symptoms only after the subsequent oral administration of the same drug. No previous references to this entity have been found.

References

1. Dolin R. Antiviral chemotherapy. In: Harrison (ed): *Principles of internal medicine*, 11th edition, ch 86, 586.
2. Camarasa J G, Serra-Baldrich E. Allergic contact dermatitis from acyclovir. *Contact Dermatitis* 1988; 19: 235-236.
3. Gola M, Francalanci S, Brusi C, Lombardi P, Sertoli A. Contact sensitization to acyclovir. *Contact Dermatitis* 1989; 20: 394-395.
4. Valsecchi R, Imberti G, Cainelli T. Contact allergy to acyclovir. *Contact Dermatitis* 1990; 23: 372-373.
5. Goday J, Aguirre A, Gil Ibarra N, Eizaguirre X. Allergic contact dermatitis from acyclovir. *Contact Dermatitis* 1991; 24: 380-381.
6. Kenneth A, Arndt M D. Adverse reactions to acyclovir: topical, oral, and intravenous. *J Am Acad Dermatol* 1988; 18: 188-190.
7. Wagstaff A J, Faulds D, Goa K L. Acyclovir: a reappraisal of its antiviral activity, pharmacokinetic properties and therapeutic efficacy. *Drugs* 1994; 47: 153-205.
8. Robbins M S, Stromquist C, Tan L H. Acyclovir pH-possible cause of extravasation tissue injury (Letter). *Ann Pharmacother* 1993; 27: 238.
9. Buck M L, Vittone S B, Zaglul H F. Vesicular eruptions following acyclovir administration. *Ann Pharmacother* 1993; 27: 1458-1459.

Table 1. Patch test results

	Fixed eruption		Normal skin	
	D1	D2	D1	D2
Zovirax cream	++	+++	-	-
acyclovir 5% pet.	++	++	-	-
propylene glycol 10% aq.	-	-	-	-
cetostearyl alcohol 30% pet.	-	-	-	-
sodium lauryl sulfate 2% aq.	-	-	-	-
petrolatum as is	-	-	-	-

This document is a scanned copy of a printed document. No warranty is given about the accuracy of the copy. Users should refer to the original published version of the material.