Avoid Systemic Antifungals for Chronic Paronychia

BY SHERRY BOSCHERT San Francisco Bureau

WINNIPEG, MAN. — Chronic paronychia is a variety of contact dermatitis that affects the proximal nail fold, so treating it with systemic antifungals is not useful, Dr. Antonella Tosti said at the annual conference of the Canadian Dermatology Association.

"Most people still believe that chronic paronychia is a candida infection. It is not," said Dr. Tosti, professor of dermatology at the University of Bologna, Italy. Instead, it starts with loss of the cuticle due to trauma or other causes, followed by

irritation, immediate or delayed allergic reaction, or immediate hypersensitivity to food ingredients handled by the patient. Chronic paronychia is a common occupational problem among food workers, she said.

With the cuticle gone, environmental agents penetrate the proximal nail fold,

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causing inflammation in the nail matrix. Yeast and bacteria also may penetrate the proximal nail fold, leading to secondary colonization that may produce self-limited episodes of painful acute inflammation with pus. A green discoloration of the nail develops with colonization by Pseudomonas aeruginosa.

That's why clinicians may be able to culture bacteria or yeast, but treating with systemic antifungals will not cure the patient because it manages only the sec-

external aspects of the lips and face. Because no data are available, application to human mucous membranes is not recommended. ZOVIRAX Cream has a potential for irritation and contact sensitization (see ADVERSE REACTIONS). The effect of ZOVIRAX Cream has not been established in the provided the sense of the sense o

immunocompromised patients. Information for Patients: Please see Patient Information About ZOVIRAX Cream.

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ADVERSE REACTIONS In 5 double-blind, placebo-controlled trials, 1,124 patients were treated with ZOVIRAX Cream and 1,161 with placebo (vehicle) cream. ZOVIRAX Cream was well tolerated; 5% of patients on ZOVIRAX Cream and 4% of patients on placebo reported local application site reactions. The most common adverse reactions at the site of topical application were dry lips, desquamation, dryness of skin, cracked lips, burning skin, pruritus, flakiness of skin, and stinging on skin; each event occurred in less than 1% of patients receiving ZOVIRAX Cream and vehicle. Three patients on ZOVIRAX Cream and 1 patient on placebo discontinued treatment due to an adverse event. An additional turb, engling 20 benchivy adults, was conducted to exclude the dermal tolegament.

20VIRAX Cream and 1 patient on placeb discontinued treatment due to an adverse event. An additional study, enrolling 22 healthy adults, was conducted to evaluate the dermal tolerance of ZOVIRAX Cream compared with vehicle using single occluded and semi-occluded patch testing methodology. Both ZOVIRAX Cream and vehicle showed a high and cumulative irritation potential. Another study, enrolling 251 healthy adults, was conducted to evaluate the contact sensitization potential of ZOVIRAX Cream using repeat insult patch testing methodology. Of 202 evaluable subjects, possible cutaneous sensitization reactions were observed in the same 4 (2%) subjects with both ZOVIRAX Cream and vehicle, and these reactions to both ZOVIRAX Cream and vehicle were confirmed in 3 subjects upon rechallenge. The sensitizing ingredient(s) has not been identified. The safety profile in patients 12 to 17 years of age was similar to that observed in adults. **Observed During Clinical Practice:** In addition to adverse events reported from clinical trials, the following events have been identified during post-approval use of acyclovir cream. Because they are reported voluntarily from a population of unknown size, estimates of frequency cannot be made. These events have been chosen for inclusion due to a combination of their seriousness, frequency of reporting, or potential causal connection to acyclovir cream.

Skin: Contact dermatitis, eczema, application site reactions including signs and symptoms of

HOUSAGE verdosage by topical application of ZOVIRAX Cream is unlikely because of minimal systemic osure (see CLINICAL PHARMACOLOGY).

exposure (see clinical FrankingColour). **DOSAGE AND ADMINISTRATION** ZOVIRAX Cream should be applied 5 times per day for 4 days. Therapy should be initiated as early as possible following onset of signs and symptoms (i.e., during the prodrome or when lesions appear). For adolescents 12 years of age and older, the dosage is the same as in adults.

HOW SUPPLIED Each gram of ZOVIRAX Cream 5% contains 50 mg acyclovir in an aqueous cream base. ZOVIRAX Cream is supplied as follows: 2-g tubes (NDC 64455-994-45). 5-g tubes (NDC 64455-994-45). Store at or below 25°C (77°F); excursions permitted to 15° to 30°C (59° to 86°F) (see USP Controlled Room Temperature).

ondary problem, not the primary inflammation. Dr. Tosti said.

Chronic paronychia should be managed like contact dermatitis is treated, with hand protection and topical steroids, she advised. For patients with secondary candida colonization, recommend a high-potency topical steroid at bedtime and a topical antifungal in the morning. "I may use systemic steroids in severe cases" to provide fast relief of inflammation and pain, she added.



Chronic paronychia is shown before treatment with topical steroids.



The same patient is shown following treatment.

Home Use of Lasers Raises Safety Questions

CARLSBAD, CALIF. — The home use of lasers and light sources for hair removal, photorejuvenation, acne treatment, and other cosmetic procedures is here to stay, Dr. Melanie C. Grossman said at a symposium on laser and cosmetic surgery, sponsored by SkinCare Physicians.

The major issue [with these devices] will be safety and efficacy," said Dr. Grossman, a dermatologist who practices in New York City. "Once the devices are in the hands of consumers, there will be problems.'

Some patients will not follow the instructions that come with the devices. Others will use the devices in concert with other procedures. "I already see people using topicals that are quite strong coming in with burns after using microdermabrators at home. These side effects will just increase.

She said although the proliferation of inhome devices has not affected her clinical practice so far, the companies that make inhome devices may "take our business away or they may increase consumer awareness of our business. Most likely, they will change the nature of our practices.

ZOVIRAX® (acyclovir) Cream 5% **USE ONLY FOR COLD SORES**

DESCRIPTION

DESCRIPTION ZOVIRAX is the brand name for acyclovir, a synthetic nucleoside analogue active against herpes viruses. ZOVIRAX Cream 5% is a formulation for topical administration. Each gram of ZOVIRAX Cream 5% contains 50 mg of acyclovir and the following inactive ingredients: cetostearyl alcohol, mineral oil, poloxamer 407, propylene glycol, sodium lauryl sulfate, water, and white petrolatum. Acyclovir is a white, crystalline powder with the molecular formula C₆H₁N₆O₂ and a molecular weight of 225. The maximum solubility in water at 37°C is 2.5 mg/mL. The pKa's of acyclovir are 2.27 or 40.26

and 9.25. The chemical name of acyclovir is 2-amino-1,9-dihydro-9-[(2-hydroxyethoxy)methyl]-6H-purin-6-one; it has the following structural formula:



CH₂OCH₂CH₂OH WROLOGY Mechanism of Antiviral Action: Acyclovir is a synthetic purine nucleoside analogue with in vitro and invio inhibitory activity against herpes simplex virus types 1 (HSV-1), 2 (HSV-2), and varicella-coster virus (VZV). The inhibitory activity of acyclovir is highly selective due to its affinity for the enzyme thymidine triphosphate, a nucleotide analogue. The monophosphate is further converted into diphosphate by cel-lural guanylate kinase and into triphosphate by a number of cellular enzymes. In vitro, acyclovir triphosphate stops replication of herpes viral DNA. This is accomplished in 3 ways: 1) competitive inhibition of viral DNA polymerase, 2) incorporation into and termination of the growing viral DNA chain, and 3) inactivation of the viral DNA polymerase. The greater antiviral activity of acyclovir y against HSV compared with ZVV is due to its more efficient phosphorylation by the viral TK. Antiviral Activities: The quantitative relationship between the in vitro susceptibility of herpes virus sonstivity testing has not been standardized. Sensitivity testing results, expressed as the con-centration of drug required to inhibit by 50% the growth of virus in cell culture (IC₆₀), vary greatly virus isolates ranges from 0.02 to 13.5 mcg/mL for HSV-1 and from 0.01 to 9.9 mcg/mL for HSV-2. The IC₆₀ for acyclovir also demonstrates activity against the Oka vaccine strain of VZV with a mean IC₆₀ of 1.35 mcg/mL.

 IG_{50} of 1.35 mcg/mL. Reylow also denotes a during against the oka valcine strain of V2V with a mean IG_{50} of 1.35 mcg/mL. **Drug Resistance:** Resistance of HSV and VZV to acyclovir can result from qualitative and quantitative changes in the viral TK and/or DNA polymerase. Clinical isolates of HSV and VZV with reduced twe changes in the viral IK and/or DNA polymerase. Clinical isolates of HSV and VZV with reduced susceptibility to acyclovir have been recovered from immunocompromised patients, especially with advanced HIV infection. While most of the acyclovir-resistant mutants isolated thus far from immunocompromised patients have been found to be TK-deficient mutants, other mutants involving the viral TK gene (TK partial and TK altered) and DNA polymerase have been isolated. TK-negative mutants may cause severe disease in infants and immunocompromised adults. The possibility of viral resistance to acyclovir should be considered in patients who show poor clinical response during theorem.

therapy. CLINICAL PHARMACOLOGY Pharmacokinetics: Adults: A clinical pharmacology study was performed with ZOVIRAX Cream in adult volunteers to evaluate the percutaneous absorption of acyclovir. In this study, which included 6 male volunteers, the cream was applied to an area of 710 cm² on the backs of the volunteers 5 times daily at intervals of 2 hours for a total of 4 days. The weight of cream applied and urinary excretion of acyclovir were measured daily. Plasma concentration of acyclovir was assayed 1 hour after the final application. The average daily urinary excretion of acyclovir was approximately 0.04% of the daily applied dose. Plasma acyclovir concentrations were below the limit of detection (0.01 µM) in 5 subjects and barely detectable (0.014 µM) in 1 subject. Systemic absorption of acyclovir from ZOVIRAX Cream is minimal in adults. Pediatric Patients: The systemic absorption of acyclovir following topical application of cream has not been evaluated in patients <18 years of age.

not been evaluated in patients <18 years of age. **CLINICAL TRIALS Adults:** ZOVIRAX Cream was evaluated in 2 double-blind, randomized, placebo (vehicle)-controlled trials for the treatment of recurrent herpes labialis. The average patient had 5 episodes of herpes labialis in the previous 12 months. In the first study, median age was 37 years (range 18 to 81 years), 74% were female, and 94% were Caucasian. In the second study, median age was 38 years (range 18 to 87 years), 73% were female, and 94% were Caucasian. Subjects were instructed to initiate treatment within 1 hour of noticing signs or symptoms and continue treatment for 4 days, with application of study medication 5 times per day. In both studies, the mean duration of the recurrent herpes labialis episode was approximately one-half day shorter in the subjects treated with ZOVIRAX Cream (n = 682) compared with subjects treated with placebo (n = 703) (approximately 4.5 days versus 5 days, respectively). No significant difference was observed between subjects receiving ZOVIRAX Cream or vehicle in the prevention of progression of cold sore lesions. **Pediatric Patients:** An open-label, uncontrolled trial with ZOVIRAX Cream 5% was conducted in 113 patients aged 12 to 17 years with herpes labialis. In this study, therapy was applied using the same dosing regimen as in adults and subjects were followed for adverse events. The safety profile was similar to that observed in adults. **INDICATIONS AND USAGE**

INDICATIONS AND USAGE ZOVIRAX Cream is indicated for the treatment of recurrent herpes labialis (cold sores) in adults and adolescents (12 years of age and older).

CONTRAINDICATIONS ZOVIRAX Cream is contraindicated in patients with known hypersensitivity to acyclovir, valacy-clovir, or any component of the formulation.

PRECAUTIONS

BIOVAIL

General: ZOVIRAX Cream is intended for cutaneous use only and should not be used in the eye or inside the mouth or nose. ZOVIRAX Cream should only be used on herpes labialis on the affected

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OVERDOSAGE

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