

Daily Application of Azelaic Acid Plus Moisturizer Soothes Rosacea

BY SHARON WORCESTER
Southeast Bureau

DESTIN, FLA. — Azelaic acid 15% gel is as effective when used once daily as when used twice daily for the treatment of papulopustular rosacea, and the concomitant use of moisturizer appears to reduce the stinging and burning that a small subset of patients experience with treatment, data from recent studies suggest.

In a randomized, double-blind study of 72 patients with at least moderate inflammatory rosacea, once-daily treatment with azelaic acid 15% gel was as effective as twice daily treatment on all measures at 12 weeks, including qualitative and quantitative assessments (J. Drugs Dermatol. 2008;7:541-6). Dr. James Q. Del Rosso said at a meeting sponsored by the Alabama Dermatology Society.

The mean inflammatory lesion count at 12 weeks was reduced from 19.8 at baseline to 6 in the 37 patients in the twice-daily group, and from 18.2 to 6.6 in 35 patients in the once-daily group, he reported.

As long as patients apply treatment appropriately, they can get twice as much duration out of a single tube, and will have outcomes with once-daily application comparable with twice-daily use in terms of lesion count reduction and overall assessment of improvement, said Dr. Del Rosso, a dermatologist in Las Vegas, who was an investigator for the study.

Also, when the treatment is used along with a moisturizer (an important component of rosacea

treatment), the incidence and severity of stinging and burning can be reduced, another study suggested.

Preliminary findings from that split-face study by Dr. Del Rosso and his colleagues showed a definite trend toward reduced stinging and burning when patients used moisturizer (CeraVe or Cetaphil cream) after the azelaic acid (J. Clin. Aesthet. Dermatol. 2008;1:20-5). It appears that moisturization repairs the moisture barrier and reduces sensitivity to the drug, he said.

As for whether moisturization or treatment should be applied first—in a recent study, Dr. Del Rosso found that regardless of which of three different moisturizers were used (CeraVe, Dove, or Cetaphil), azelaic acid penetration was not impaired, whether the moisturizer was applied before or after the azelaic acid 15% gel in a human skin assay test.

In a recent clinical study of patients with acne vulgaris, the efficacy of tazarotene 0.1% cream was not affected by prior application of a ceramide-based moisturizer (CeraVe) but tolerability was improved with application of the moisturizer first, he said.

These findings are a good start for helping dermatologists advise rosacea and acne patients about what, when, and how to use their medications and adjunctive skin care products, he said.

Dr. Del Rosso serves as a consultant, speaker, and/or clinical researcher for Intendis, Allergan, Coria Laboratories, Galderma, Medicis, OrthoNeutrogena, Quinova Pharmaceuticals, Ranbaxy, SkinMedica, Stiefel, Triax Pharmaceuticals, Unilever, and Warner Chilcott. ■

Ointments Show Similar Efficacy for The Treatment of Pediatric Vitiligo

BY DAMIAN McNAMARA
Miami Bureau

MONTREAL — Clobetasol propionate and tacrolimus ointments offer similar efficacy for treatment of pediatric vitiligo, according to a prospective, randomized, double-blind clinical trial.

Both topicals were superior to placebo in this study of 100 pediatric patients. In addition, facial lesions responded quicker than did nonfacial ones to either active treatment in the 6-month study, Dr. Nhung Ho said at the annual conference of the Canadian Dermatology Association.

Fifty boys and 50 girls were randomized to one of three groups. Thirty-three applied clobetasol propionate 0.05% ointment (available as a generic) for 2 months, then placebo ointment for 2 months, followed by clobetasol again for 2 months. The on-and-off cycle design was used to minimize safety concerns, said Dr. Ho, a pediatric dermatologist at the Hospital for Sick Children in Toronto.

The second group, which had 34 patients, applied tacrolimus 0.1% ointment (Protopic, Astellas Pharma US Inc.) for 6 months, and the remaining 33 patients applied a placebo for 6 months.

Participants were aged 2-16 years and vitiligo affected less than 20% of their body surface area at baseline. They were enrolled at either a dermatology outpatient clinic or a private office between June 2005 and December 2007. A research grant from Astellas Pharmaceuticals funded the study.

Three assessors reviewed standardized photos at baseline, 2, 4, and 6 months. Successful response was defined as more than 50% repigmentation of lesions.

There were 45 participants with facial vitiligo and

55 others with nonfacial lesions. In the facial group, 58% responded to clobetasol propionate and 58% responded to tacrolimus. The effect was lower for those with nonfacial lesions, with 39% responding to clobetasol propionate and 23% to tacrolimus. Both active treatments were significantly better than placebo. A total of 24% of the placebo patients—7 of 29 who completed the study—responded, 5 partially and 2 with greater than 50% repigmentation, she said.

There were no significant adverse events reported. Some patients experienced transient erythema but no atrophy occurred.

Possible limitations of the study include its short duration and small number of patients, Dr. Ho said.

Vitiligo affects an estimated 1%-4% of the world's population. It presents in children of all races, with predominance in girls, and about 50% of lesions develop before age 20 years. The pathogenesis of childhood vitiligo is still unknown, she noted.

Evidence supports the use of topical therapies for localized pediatric vitiligo. In one retrospective study, moderate- to high-potency topical corticosteroids caused repigmentation of vitiligo lesions for 45 of 70 children (64%). Another 24% (17 children) showed no change, and 11% (8) had their vitiligo worsen. Systemic absorption (29% of participants had abnormally high cortisol levels) was a caveat in this study (J. Am. Acad. Dermatol. 2007;56:236-41).

In another retrospective study of 57 pediatric patients, tacrolimus ointment caused at least a partial response in 89% of facial vitiligo lesions (J. Am. Acad. Dermatol. 2004;51:760-6). Response to the topical was lower for lesions on the trunk and extremities, with at least a partial response reported by 63% of patients. ■

Cephalexin Last on List For CA-MRSA Infections

BY BETSY BATES
Los Angeles Bureau

HONOLULU — For community-acquired methicillin-resistant *Staphylococcus aureus* infections of the face, cephalexin should rarely be the antibiotic of choice, according to a decision analysis presented by researchers at the University of California, San Francisco, and at the annual meeting of the Pediatric Academic Societies.

And a second study, from Cardinal Glennon Children's Medical Center in St. Louis, questioned whether an antibiotic is needed at all to treat a primary skin infection if abscesses are incised and drained.

In the San Francisco study, Dr. Adam Hersh and associates weighed the trade-offs associated with three antibiotic choices—cephalexin, trimethoprim/sulfamethoxazole, or clindamycin—for empiric treatment of a purulent skin infection in a child younger than 18.

Cephalexin does not treat CA-MRSA; trimethoprim/sulfamethoxazole does not treat group A *Streptococcus*; and although clindamycin treats both, CA-MRSA is becoming increasingly resistant to it in some communities, said Dr. Hersh.

When community physicians consistently culture skin infections and prevalence and resistance rates can be developed, a decision tree analysis can be a method of "exquisitely weighing of the tradeoffs between treatment choices," he said.

In communities that have a prevalence of CA-MRSA of greater than 10%, cephalexin is least likely to be effective, although it is the most widely prescribed antibiotic for this indication, the researchers noted.

Choosing between trimethoprim/sulfamethoxazole and clindamycin remains a delicate decision, depending on CA-MRSA resistance and prevalence of group A strep in an individual community.

In San Francisco, the overall prevalence of *S. aureus* in cultures of purulent pediatric skin infections is 90% (80% caused by CA-MRSA; 20% by methicillin-sensitive *S. aureus*). Of the remaining 10%, cultures show group A strep more than 99% of

the time, said Dr. Hersh in an oral, late-breaking presentation.

Using these figures for a "base case" analysis, he concluded that probability rates for each drug having activity against an empiric skin infection were 95% for clindamycin, 89% for trimethoprim/sulfamethoxazole, and 28% for cephalexin.

Higher group A strep prevalence or high-rate clindamycin

Higher group A strep prevalence or clindamycin resistance would tilt the decision tree model to trimethoprim/sulfamethoxazole or cephalexin.

resistance in a community would tilt the decision tree model to trimethoprim/sulfamethoxazole or cephalexin, but it would be the rare community in which CA-MRSA prevalence was so low it would favor cephalexin for skin infections or other CA-MRSA affected

conditions such as osteomyelitis or septic arthritis, said Dr. Hersh.

Dr. Myto Duong and associates in St. Louis selected trimethoprim/sulfamethoxazole for a randomized, controlled, double-blind trial comparing antibiotic treatment of skin and soft tissue infections with treatment with incision and drainage in 161 immunocompetent children who presented to the emergency department at Cardinal Glennon Children's Medical Center. About half of the subjects were less than 5 years old.

Wound cultures showed CA-MRSA in 129 children (80%)—with 18% also clindamycin resistant—and methicillin-sensitive *S. aureus* in 14 (9%). Other bacteria were responsible for infections in remaining cases, including group A strep in 1%. Twelve patients were lost to follow-up.

In patients with complete data, there was complete resolution of lesions in 95% receiving a placebo after incision and drainage; and 96% of those receiving incision, drainage, and a 10-day antibiotic prescription before discharge. Compliance (taking at least half of the medication prescribed), was poor, at 66%.

Development of a new purulent skin lesion after treatment was equally likely in compliant patients on antibiotic or placebo. In the noncompliant subset, receipt of an antibiotic cut the risk of developing a new purulent skin lesion. In this group, 23% of those on placebo developed a new lesion versus 4% who received an antibiotic prescription.

Dr. Duong and Dr. Hersh disclosed no financial conflicts. ■