Topical Antioxidant Soothes Shaving Irritation

BY DAMIAN MCNAMARA

Miami Bureau

MIAMI — A topical tocopheryl phosphate complex effectively reduced problems associated with sensitive skin and shaving-induced irritation in a study of 28 Hispanic, Asian, and other participants.

Tocopheryl phosphate occurs naturally and is found in many animal and plant species, Roger McMullen, Ph.D., said at an international symposium sponsored by L'Oréal Institute for Ethnic Hair and Skin Research.

The livers of rats, guinea pigs, and chickens, and the adipose tissue of guinea pigs, rats, and humans contain tocopheryl phosphate. It is also found in wheat germ oil, butter, cheddar cheese, olive oil, and chocolate, said Dr. McMullen, a researcher at International Specialty Products in Wayne, N.J.

Researchers studied a lipophilic tocopheryl phosphate complex (Vital ET, International Specialty Products) for relief of sensitive and/or irritated skin since it had demonstrated efficacy in previous studies.

Tocopheryl phosphate inhibited inflammatory and proliferative pathways in previous animal studies.

The substance "also provides protection against oxidative stress, but not through a free radical scavenging mechanism," said Dr. McMullen, who presented findings of the current study on behalf of David J. Moore, Ph.D., a senior science fellow at International Specialty Products.

There are many skin care products on the global market that contain Vital ET, Dr. Moore said in an interview after the meeting.

The researchers assessed the ability of the lipophilic tocopheryl phosphate complex to relieve symptoms of skin sensitive to shaving in Hispanic, Asian, and other study participants.

They applied a balm containing 2% tocopheryl phos-

phate once daily for 4 weeks. There were 13 men who shaved their faces daily and 15 women who shaved their legs every other day. There were four Hispanic and seven Asian participants.

Erythema, folliculitis, tactile roughness, dryness, skin clarity, and nicks and cuts were clinically graded at baseline. A board-certified dermatologist then rated these parameters at week 2 and week 4. Participants also scored any burning, stinging, itching, or tightness.

"All objective and subjective graded parameters of irritated or sensitive skin were significantly improved compared to baseline. The very significant efficacy for all clinically graded parameters at 2 and 4 weeks ... was delivered in a real skin care formulation," Dr. McMullen said at the meeting, which was also sponsored by Howard University.

"We were not surprised, as this was our third clinical study with Vital ET and both previous studies had demonstrated significant efficacy in mitigating skin irritation," Dr. Moore said.

The previous research involved treatment of UV-induced erythema or acne with the product applied in a simple gel formulation, he

noted.

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In the current study, erythema improved from a mean score of 5 at baseline to a mean of 2 after 2 weeks and a mean of 1 after 4 weeks. These improvements were observed in all study participants, said Dr. McMullen.

Similarly, improvements in skin clarity were observed at 2 weeks and 4 weeks, compared with baseline, in all participants. In addition, "there was a big drop in folli-



An Asian patient with shaving-induced irritation is shown before using a skin balm containing tocopheryl phosphate complex.



The patient is shown 2 weeks after daily treatment with the skin care formulation. Skin improvements were observed in all study patients.

culitis from baseline to 2 weeks," he said.

"We are currently conducting human ex vivo skin studies at ISP Global Skin Research in Nice, France, to further understand the biologic activity of Vital ET in skin," Dr. Moore said. Researchers are assessing its protective effect on Langerhans cells and its role in protecting the skin from glycation stress.

"After this work is complete, we expect to conduct further human clinical studies," he said.

Lips' Color Characteristics Appear to Vary by Ethnicity, Age

BY DAMIAN MCNAMARA

Miami Bureau

MIAMI — Differences in lip color vary by ethnicity and with aging, according to a study presented at an international symposium sponsored by L'Oreal Institute for Ethnic Hair and Skin Research.

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range of lip shades," said Diane Baras, an engineer at L'Oreal Inc. in Chevilly-Larue, France.

Ms. Baras and her associates compared 914 women. They measured lip hue (red/orange color), intensity (chroma/color saturation), and lightness among 238 American black, 238 American white, 225 French white, and 213 Japanese women. All participants were adults between the ages of 18 and 65 years.

The researchers also assessed properties of the perioral skin just below the left corner of the mouth. Younger and older participants were compared to determine how aging affects the lip and perioral skin.

Investigators used the L'Oreal Chromasphere diffuse lighting system to quantify color properties, a corneometer to measure dryness of the lips, and front and profile photographs to assess lip height and plumpness.

"There are some ethnic differences, which emphasizes how we need individualized products for different women," Ms. Baras said at the meeting, which was also sponsored by Howard University.

In terms of hue, lips were strongly redder than perioral skin. This was a positive

finding, she said, because "a lot of women want to have a high contrast between the vermilion zone" and perioral skin. In contrast, the hue of the skin was more yellow.

There was no significant difference in chroma or color saturation between the lips and perioral skin.

Lightness did vary in the study. The vermilion zones are always darker than the perioral skin, except in African American women, Ms. Baras said.

Capacitance was measured with a corneometer. Capacitance, which reflects the water content in the skin, was significantly stronger in the vermilion zone, compared with the perioral skin. In addition, there was a "big difference" in transepidermal water loss measured with a VapoMeter, she said. The lower lip lost significantly more water than did perioral

skin. Interestingly, this water loss did not significantly differ with age, she noted.

Aging did modify other lip and skin properties. The findings were based on comparisons among an equal number of participants in the 18- to 35-year, 36- to 50-year, and 51- to 65-year age ranges.

For example, there was a decrease in lightness with aging. "A lot of older women will say their lips become pale, that there is 'no life' [to their lips] anymore," Ms. Baras said. "We know they are not pale, because they become darker.

But the chroma decreases, so there is a loss of radiance."

Age-related morphology changes also were revealed. There was a strong decrease in the height of the mouth—an average of 3 mm—between younger and older white women, and an even more pronounced decrease of 3.5 mm among American black women.

There was a strong decrease in lip plumpness as well. With age, "lips lose some substance, vitality, and some life," Ms. Baras said.

