

Topical Vitamin K Oxide Gel Curbs Postlaser Bruising

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MAUI, HAWAII — Topical vitamin K oxide gel appears to help speed resolution of facial bruising induced by cosmetic procedures, according to a small randomized, double-blind, vehicle-controlled study.

The trial, of 16 patients undergoing pulsed dye laser therapy for facial telangiectasias demonstrated that vitamin K oxide gel (Auriderm) resulted in a mean 15% reduction in laser-induced purpura, compared with placebo. Dr. Joel L. Cohen said at the annual Hawaii dermatology seminar.

That's a modest benefit. Yet numerous studies have shown that patients opting for cosmetic procedures deem improvements of such magnitude clinically meaningful, noted Dr. Cohen, a dermatologist in Englewood, Colo.

Moreover, the protocol chosen for this study tended to underestimate the benefits of vitamin K oxide gel as used in everyday clinical practice, he said at the seminar. The meeting was sponsored by the Skin Disease Education Foundation.

In his study, 16 patients with bilateral facial telangiectasias were treated once on each side with an equal number of pulses from a pulsed dye laser (PDL). Patients applied vitamin K oxide gel to one side of the face and a vehicle to the other side 15-30 minutes post procedure and twice daily thereafter. The severity of purpura was

blindly evaluated on days 2, 4, 6, and 9.

Resolution of purpura was consistently greater on the vitamin K oxide gel side of the face beginning on day 4. In fact, the greatest difference in bruising between the treatment and control sides was noted on day 4; thereafter, the natural bruise resolution process came to the fore.

The 15% advantage in purpura resolution favoring vitamin K oxide gel didn't achieve statistical significance because of the small size of the trial.

The control vehicle may have been a poor choice because it's not inert, according to Dr. Cohen. It contains vitamins C and E, which are known to reduce the ferric iron in hemosiderin to ferrous iron, which probably hastened

the breakdown of hemosiderin and the clearing of bruises.

In clinical practice, he said he routinely uses vitamin K oxide gel not only following laser therapy but after injecting fillers. "I usually have patients use it four to five times per day. First I use it as a lubricant to massage in the fillers; then I have patients purchase the product and go home with it," he explained. Vitamin K oxide gel is an OTC product dispensed in physicians' offices.

Dr. Suzanne L. Kilmer said she has found the PDL to be highly effective in hastening resolution of bruising caused by the injection of fillers. She uses the laser at 6 milliseconds and 7-10 J/cm² on post-

procedure day 2 or later, adjusting the energy downward slightly if the bruise is especially dark to avoid blistering.

"It works really well. It's amazing. We routinely now tell our patients, 'If you have a lot of bruising, give me a call tomorrow and we'll get you in the next day for the PDL.' If you do a lot of fillers, it really improves patient satisfaction," according to Dr. Kilmer of the University of California at San Diego.

Dr. Cohen emphasized the importance of teaching the office staff how to tell the difference between filler-related bruising and impending tissue necrosis: If a filler patient phones in and reports significant pain, it's a red flag. Anatomic areas where the underlying vascular distribution should raise extra concern when a patient reports pain are the glabella, the nasolabial fold, alar groove, superior and inferior labial artery, and parotid duct, especially in patients with HIV-related facial lipoatrophy, in whom the duct sits close to the skin surface.

Dr. Cohen reported that he is a consultant to Biopelle Inc., which supported the Auriderm trial. Skin Disease Education Foundation, Skin & Allergy News, and Global Medical News Network are owned by Elsevier. ■



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