Vitamin K Oxide Gel Quells Postlaser Bruising

BY BRUCE JANCIN

MAUI, HAWAII — Topical vitamin K oxide gel appears to help speed resolution of facial bruising induced by cosmetic procedures, reported Dr. Joel L. Cohen.

His randomized, double-blind, vehicle-controlled 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.

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 annual Hawaii dermatology seminar sponsored by 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.

Purpura resolution 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 did not achieve statistical significance because of the small size of the trial, according to Dr. Cohen.

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.

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DR. COHEN

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 filler injection. She uses the laser at 6 milliseconds and 7-10 J/cm^2 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.

Dr. Cohen reported that he is a consultant to Biopelle Inc., which supported the Auriderm trial. SDEF and this newspaper are owned by Elsevier. ■