

### QuickREAD

**Topically applied hyaluronic acid sodium salt 0.2 percent** appears useful in combating skin irritation and inflammation caused by treatments such as intense pulsed light, plasma skin resurfacing and medium-depth peels, as well as topical retinoids, tazarotene and 5-FU, an expert says.

# Exploring topical hyaluronic acid

**Rx helpful in combatting skin irritation, inflammation**

**By JOHN JESITUS**

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**New York** — Topically applied hyaluronic acid (HA) appears helpful in healing a variety of treatment-induced skin breakdowns, according to an expert.

Previous research has reported on the impact of topical HA applied after retinoid administration and, in one controlled study, after intense pulsed light (IPL) treatments, says Cherie M. Ditre, M.D., director of cosmetic dermatology and of the Skin Enhancement Center and assistant professor of dermatology, University of Pennsylvania School of Medicine, Radnor, Pa.



Dr. Ditre

However, Dr. Ditre says recent case studies provide insight into the many patient variables that may exist in clinical practice, as well as into use of topical HA after treatment with 5-fluorouracil (5-FU).

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**What would happen if one used HA topically?”**

— Cherie M. Ditre, M.D.  
University of Pennsylvania  
Radnor, Pa.

Dr. Ditre tells *Dermatology Times* she has used topically applied HA sodium salt 0.2 percent (Bionect, JSJ Pharmaceuticals) for about two years, starting with a patient who experienced irritation after treatment with Efudex (5-FU, Valeant Pharmaceuticals).

Because Dr. Ditre had previously heard a lecture by Judah Folkman, M.D., on the use of oral HA and doxycycline to combat erythema and inflammation of the skin, “The idea came to me: What would happen if one used HA topically?”

The idea made sense, because HA partially blocks the COX-2 inflammation pathway, Dr. Ditre says. After prescribing topical HA to the patient who’d experienced irritation from 5-FU, she says, “Lo and behold, she returned one week later and looked great. She was thrilled, because I didn’t need to prescribe any steroids” to combat the inflammation.

Since then, Dr. Ditre says she’s treated approximately 15 IPL study patients with topical HA (publication pending), and another 100 or so who experienced irritation mainly after using topical retinoids.

“I’ve also used it with patients whose skin reacted to various forms of 5-FU,” she says.

“It was well-tolerated in the IPL study,” Dr. Ditre says. “The other important factor is that after procedural treatments, no patients had to stop using it because it irritated or bothered their skin — just



the opposite; it seemed to calm their skin down.”

Regarding dosing, she says she typically instructs patients to rub two pea-sized amounts of the prescription HA product over their entire faces twice daily for about a week.

For patients with retinoid dermatitis in particular, Dr. Ditre adds, “I have them combine it with their Retin-A (tretinoin, OrthoNeutrogena) or Tazorac (tazarotene, Allergan) at night to try and mitigate some of the irritation.”

After IPL treatments, Dr. Ditre recommends using topical HA for seven to 10 days on the face and 14 days for the chest, back and hands.

“Have patients put it on right after the procedure and send them out with the dressing on that day,” Dr. Ditre says.

After medium-depth peels using trichloroacetic acid or Jessner’s peel, she recommends starting patients on HA sodium salt two days after treatment, applying the product twice daily for seven to 10 days until the skin is completely re-epithelialized.

This regimen decreases pain and redness and noticeably speeds healing, Dr. Ditre says.

After plasma skin resurfacing, she recommends starting on day two, alternating with moisturizer, and applying twice daily until skin is completely re-epithelialized. This way, Dr. Ditre says,

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that may exist in  
clinical practice.

“One can expect improvement in seven to 10 days.”

After electro-desiccation and curettage for skin cancers, basal cell carcinomas or early squamous cell carcinomas, Dr. Ditre advises alternating topical HA sodium salt with an antibiotic to promote healing.

For chronic venous stasis ulcers, she recommends applying the product twice daily until the wound re-epithelializes, which can take one to three months, depending on the ulcer’s severity.

In the future, Dr. Ditre says she plans to try the product for post-sunburn patients, and perhaps those with rosacea. As for selecting a formulation, Dr. Ditre recommends giving patients a sample of gel, cream and spray so they may choose the one they prefer. **DT**

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