

CONFERENCE COVERAGE

Adding calcipotriene to 5-FU dramatically reduced AKs

Publish date: June 9, 2016

By [Amy Karon](#); Dermatology News

▼ Vitals

Key clinical point: A combination of 5% 5-fluorouracil cream and 0.005% calcipotriene was significantly more effective at removing actinic keratoses at different anatomic sites as 5-FU monotherapy.

Major finding: At week 8, the combination group had an average 86% reduction in the number of facial AKs, compared with 26% with 5-FU monotherapy.

Data source: A randomized, double-blind, controlled study of 131 patients with at least four AKs on the face, scalp, and/or upper arms.

Disclosures: Dr. Demehri had no disclosures.

AT THE 2016 SID ANNUAL MEETING

SCOTTSDALE, ARIZ. – A four-day topical combination regimen of 5-fluorouracil (5-FU) and calcipotriene removed almost 90% of facial actinic keratoses – significantly more than with 5-FU monotherapy, in a randomized, double-blind controlled study.

Calcipotriene ([Dovonex](#)

http://www.accessdata.fda.gov/drugsatfda_docs/label/2015/020273s013,020554s012lbl.pdf)

is a synthetic vitamin D₃ derivative approved by the Food and Drug Association for treatment of scalp psoriasis. But calcipotriene is also an immunomodulator that induces thymic stromal lymphopoietin (TSLP), which suppresses the growth of early stage skin cancers, said Dr. [Shawn Demehri](#) <http://www.massgeneral.org/research/researchlab.aspx?id=1639> , of Harvard Medical School, Boston.

To determine whether short-term TSLP induction could reduce AKs, he and his coinvestigators randomly assigned 131 men and women who were at least 50 years old and who had at least four AKs on the face, scalp, and/or upper arms to apply 5% 5-FU cream mixed with either 0.005% calcipotriene or Vaseline to affected areas twice daily for four days. The researchers counted and photographed the AKs at baseline and at subsequent follow-up visits.

Dr. Shawn (Shadmehr) Demehri

The average age of the patients was 70 years, and 82% were men, said Dr. Demehri, who reported the results at the annual meeting of the Society for Investigative Dermatology. The combination of 5-FU and calcipotriene was associated with an 86% reduction in the number of facial AKs, compared with a 26% reduction among patients who used 5-FU monotherapy (*P* less than .0001).

The investigators observed equally dramatic differences in efficacy at other body sites. On the scalp, combination therapy reduced the number of AKs by 76%, while 5-FU alone reduced the number by only 6%. On the right upper arm, the dual regimen removed 70% of AKs compared with 10% for monotherapy, and on the left upper arm, combination treatment removed 80% of AKs, while 5-FU alone removed only 16% (all *P* values for these differences were less than .0001).

Notably, patients did not experience pain or crusting after using the combination cream, said Dr. Demehri, who is also a principal investigator in the department of dermatology and MGH Cancer Center, Massachusetts General Hospital, Boston. The combination of 5-FU and 0.005% calcipotriene “acts as a potent topical immunotherapeutic agent against actinic keratosis,” he concluded.

Dr. Demehri had no disclosures.

References

Copyright © 2018 [Frontline Medical Communications Inc.](#), Parsippany, NJ, USA. All rights reserved. Unauthorized use prohibited. The information provided is for educational purposes only. Use of this Web site is subject to the [medical disclaimer](#) and [privacy policy](#).