

Humectant Occlusive Protective Emollient

## NEWSLETTER

## TABLE OF CONTENTS



#### **DOCTOR'S CORNER**

- Introduction
- · Treatment for acne
- · Moisturizers for acne
- Ceramide-containing moisturizer
- · Clinical evidence

**Dr. Anil Ganjoo**, MBBS, MD. Consultant Dermatologist and Laser Surgeon, Founder Director, Skinnovation Clinics, New Delhi, President SAARC AAD



## **GUIDELINE UPDATE**

 S2k guideline for the treatment of hidradenitis suppurativa/acne inversa



#### **CONFERENCE UPDATE**

European Academy of Dermatology and Venereology (EADV) Symposium 2024

 The use of dermocosmetics in patients receiving a systemic treatment for acne



**CROSSWORD & QUIZ** 

Think Moisturizer
Think Ajanta Dermatology

## Think Moisturizer Think Ajanta Dermatology





Ceramide & Colloidal Oat meal based moisturiser



#### Facial moisturiser









Epidermosil®, Bio-PGA, Oliconev mide, Derma-Clera®, Ascorbosilane C



# Think Moisturizer Think Ajanta Dermatology

#### **ISSUE 11**





## Dr. Anil Ganjoo

MBBS, MD

Consultant Dermatologist and Laser Surgeon Founder Director, Skinnovation Clinics, New Delhi

President SAARC AAD

#### Introduction

Acne is projected to affect 9.4% of the global population, ranking it eighth among skin diseases. Acne affects more than 85% of teenagers, and the disease can persist into adulthood, which often occurs in females and accounts for two-thirds of dermatologist consultations. The unique lesions can be either

non-inflammatory (open/black and closed/white comedones) or inflammatory (papules, pustules, nodules, and cysts), leading to **scar development and pigmentation on the skin,** necessitating prolonged and persistent therapy. Typically, lesions are observed on the face, neck, upper back, and chest.<sup>1</sup>

## **Treatment for acne**

The main goal of acne treatment is to **prevent and** lessen existing inflammatory or non-inflammatory acne lesions, improve appearance, prevent or minimize potential adverse effects, minimize the duration of the disorder, and minimize any scarring and morbidity.<sup>2</sup>

Multiple acne therapies include systemic and topical retinoids, antibacterials, systemic and topical antibiotics, and benzoyl peroxide (BPO). Many of the medications typically used can cause skin irritation and dry skin conditions and may lead to nonadherence and, thus, treatment failure.<sup>3</sup>

## **Moisturizers for acne**

Skin dryness may lead to disruption of the outermost layer of the skin, that is, stratum corneum, resulting in **Transepidermal Water Loss (TEWL).** Moisturizing the skin may reduce extreme dryness or oiliness that causes damage to the skin, which further leads to common skin conditions such as acne. **A good moisturizing agent helps maintain a sufficient hydration level and** 

protects skin barrier function, preventing the production of extra oil that can clog the pores and lead to more acne breakouts. Moisturizers as adjunctive therapy have proven benefits in enhancing the management of certain dermatologic conditions. Thus, moisturizers are recommended in addition to the primary therapy for acne.<sup>2</sup>





## **Ceramide-containing moisturizer**

Acne patients have a deficiency in total ceramides and free sphingosine. Therefore, skin barrier dysfunction and various triggering events may contribute to the signs and symptoms of acne. There is evidence of the benefits of the use of moisturizers as well as the application of ceramides containing moisturizers. Using moisturizers aims to improve skin condition, reducing irritation and inflammation. This may result in a more rapid improvement in the acne and skin condition

than in other circumstances and improve patient adherence and treatment efficacy. *In vitro* and *in vivo* studies showed a strong antimicrobial effectiveness of skin-identical phytosphingosine produced by ceramides. Both *in vitro* and *in vivo*, the phytosphingosine-containing product showed excellent clinical results in skin care for acne based on anti-inflammatory and antimicrobial activity.<sup>3</sup>

#### **Clinical evidence**

## Ceramide-containing adjunctive skincare for skin barrier restoration during acne vulgaris treatment<sup>4</sup>

#### **Objective**

Researchers examined the effect of a ceramide-based skincare regimen as compared to a non-ceramide-containing skincare regimen in participants with moderate facial acne who used adaptalene (0.3%) and benzoyl peroxide (2.5%)(A/BPO) once daily in the evening. The goal was to determine the value of ceramides in mitigating acne medication-enhanced barrier dysfunction.

#### **Methods**

#### Study design

Single center, double-blinded, randomized study



#### **Treatment**

Treatment group (n=45): Ceramide-containing foaming facial cleanser and facial lotion (used twice daily) + A/BPO gel once daily

Control group (n=46): Basic foaming face wash (used twice daily) + A/BPO gel once daily



#### **Assessments**

Participant and investigator tolerability and efficacy were evaluated

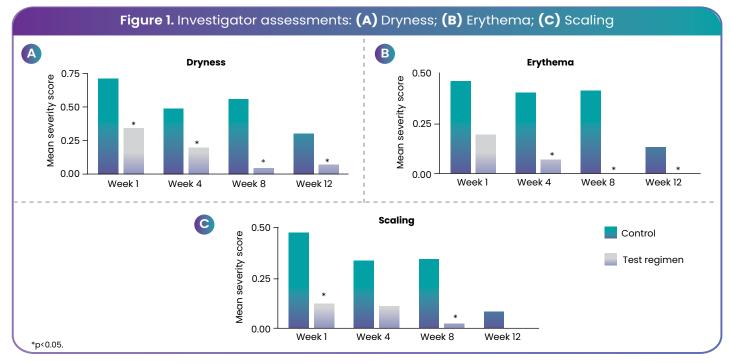
Acne lesion counts, Investigator's Global Assessments (IGA), transepidermal water loss (TEWL) were measured at all visits\*

\*Evaluated at baseline, week 1, week 4, week 8, and week 12. A/BPO: Adapalene/benzoyl peroxide.

#### Results

- TEWL increased at week 1 for both groups after treatment initiation. Its increase was less in the ceramide group than in the control group. TEWL continued to decrease for both groups over time, but the ceramide group showed a statistically significant decrease at weeks 4, 8, and 12 compared to the control group.
- Investigator assessments:
  - The ceramide group had significantly less dryness starting at week 1 and continuing through week 4 compared to the control group (Figure 1A).
  - Erythema resolved in the ceramide group at week 8 but persisted in the control group until the end of the study (Figure 1B).
  - Scaling was significantly reduced in the ceramide group at week 1 and was completely resolved by week 12 (Figure 1C).





- Participants rated the ceramide regimen as superior to the control regimen beginning at week 1 and continuing through week 12 in terms of dryness, tightness, and comfort starting at week 1 through week 12. About 97.8% of participants were satisfied with the ceramide treatment regimen.
- Both regimens contained the prescription acne medication so both regimens resulted in a decrease in inflammatory and non-inflammatory lesion counts. Thus, the ceramide treatment regimen did not interfere with the prescription acne medication.

The use of a ceramide-containing cleanser and moisturizer significantly reduced the severity and incidence of dryness, erythema, and scaling while resolving barrier damage and restoring barrier function.

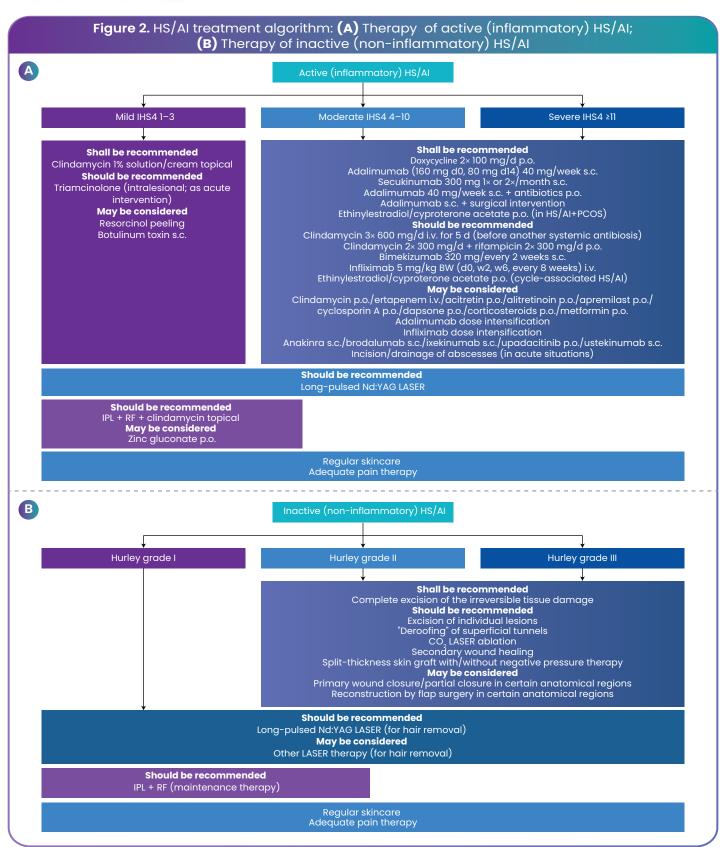
References: 1. Vasam M, Korutla S, Bohara RA. Acne vulgaris: A review of the pathophysiology, treatment, and recent nanotechnology based advances. Biochem Biophys Rep. 202323;36:101578. 2. Gala M, Aich B, Bhureddy S, et al. Skin moisturizing and anti-acne effect of acne moisturizer in healthy adult subjects with mild-to-moderate acne-an open label, single arm clinical study. CosmoDerma. 2023;3(85):1–9. 3. Lynde WC, Andriessen A, Barankin B, et al. Moisturizers and ceramide-containing moisturizers may offer concomitant therapy with benefits. J Clin Aesthet Dermatol. 2014;7(3):18–26. 4. Draelos ZD, Baalbaki N, Colon G, et al. Ceramide-containing adjunctive skin care for skin barrier restoration during acne vulgaris treatment. J Drugs Dermatol. 2023;22(6):554–558.



## S2k guideline for the treatment of hidradenitis suppurativa/acne inversa

- The S2k guideline on hidradenitis suppurativa/acne inverse (HS/AI) aims to provide an accepted decision aid for the selection/implementation of appropriate/sufficient therapy. HS/AI is a chronic, recurrent, inflammatory, potentially mutilating skin disease of the terminal hair follicle-glandular apparatus, with painful, inflammatory lesions in the apocrine gland-rich regions of the body.
- Based on consensual recommendations, the expert group has outlined the following therapeutic algorithm for active inflammatory HS/AI and inactive, predominantly noninflammatory HS/AI for the stage-related therapy of HS/AI (Figures 2A and 2B).





IHS4: International Hidradenitis Suppurativa Severity Scoring System; PCOS: Polycystic ovarian syndrome; HS/Al: Hidradenitis suppurativa/acne inverse; s.c.: Subcutaneous; i.v: Intravenous; d: Days; p.o.: By mouth; BW: Body weight; Nd:YAG: Neodymium-doped yttrium aluminum garnet; IPL + RF: Intense pulsed light + radiofrequency; CO<sub>2</sub>: Carbon dioxide.

Reference: Zouboulis CC, Bechara FG, Fritz K, et al. S2k guideline for the treatment of hidradenitis suppurativa/acne inversa - Short version. J Dtsch Dermatol Ges. 2024;22(6):868-889.







## European Academy of Dermatology and Venereology (EADV) Symposium 2024

## The use of dermocosmetics in patients receiving a systemic treatment for acne

#### Introduction

Acne affects both adolescents and adults, carrying a significant psychological and social burden. The stigma associated with appearance and its impact on quality-of-life highlight the importance of effective therapeutic strategies that are well-accepted by patients.

#### Materials and methods

#### Study design

Prospective observational study, approved by the Ethics Committee of the Ile de France VII [2022-A02154-39]



#### **Participants**

Patients with moderate-to-severe acne receiving systemic acne treatment and a dermocosmetic were recruited from over 30 dermatologists in France (n=141)



#### Patient-reported outcomes (PRO)

Acne impact on activities of daily living (AI-ADL) and psychological understanding of stigmatization in dermatology (PUSH-D) for assessing disease burden and stigma



#### Acne severity assessment

Diagnosed by dermatologists using the Global Evaluation Acne (GEA) scale



#### **Comparison groups**

Exposed group: Received dermocosmetics with essential ceramides, hyaluronic acid, and niacinamide OR salicylic acid, vitamin pellagra-preventive (PP), and kaolin clay

Non-exposed group: Received other dermocosmetics

#### Results

## Primary expectations of the patients

The dermocosmetic should be comfortable, leave a non-greasy finish and be fast-acting.

#### PRO scores (AI-AD and PUSH-D)

For 91 patients, scores decreased from 30±15.8 and 22.4±19.9 (inclusion day) to 19.1±14.4 and 14.3±14.8 (Day 28), indicating improvement.

#### Outcomes

Statistically significant improvements in burden (40% vs. 30%) and stigma (37% vs. 32.7%) scores were observed in the exposed vs. unexposed groups, with patients' primary expectations significantly met.

AI-ADL: Acne impact on activities of daily living; PUSH-D: Psychological understanding of stigmatization in dermatology.

Dermocosmetics containing essential ceramides, hyaluronic acid, niacinamide or salicylic acid, vitamin PP, and kaolin clay demonstrated superior benefits in meeting patient expectations and enhancing quality-of-life.

Reference: Skayem C, Taieb C, JD Daumont, et al. The use of dermocosmetics in patients receiving a systemic treatment for acne: A comparative real-world study. Available at: https://eadv.org/wp-content/uploads/scientific-abstracts/EADV-symposium-2024/Acne-and-related-disorders-hidradenitis-suppurativa.pdf. Accessed on November 18, 2024.

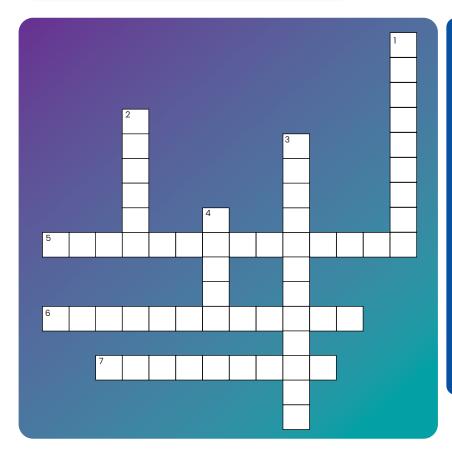






Humectant Occlusive Protective Emollien

## **CROSSWORD & QUIZ**



#### **ACROSS**

- Thickening of the outer layer of the skin, which can contribute to the formation of comedones
- **6.** A key feature of acne, often leading to redness and swelling
- A primary lesion in acne, either open (blackhead) or closed (whitehead)

#### **DOWN**

- A class of medications, derived from vitamin A, used in acne treatment for their comedolytic properties
- 2. A small, raised, solid pimple or swelling, often part of acne lesions
- Products used to hydrate the skin are important in acne care to prevent dryness, especially with retinoids
- **4.** An oily substance produced by sebaceous glands that can contribute to acne when overproduced

Across: 5. Hyperkeratosis; 6. Inflammation; 7. Comedones. Down: I. Retinoids; 2. Papule; 3. Moisturizers; 4. Sebum.

:srewers

- What is the primary role of ceramides in the skin when used in moisturizers for acne management?
- A. Reducing sebum production
- B. Strengthening the skin barrier
- C. Exfoliating dead skin cells
- D. Killing acne-causing bacteria
- 2. How do ceramide-containing moisturizers help prevent the irritation caused by topical acne treatments like retinoids?
- A. By increasing oil production
- B. By providing anti-inflammatory effects
- C. By maintaining moisture and reducing transepidermal water loss
- D. By acting as an antibacterial agent

- 3. In the context of acne management, which of the following is a key benefit of using ceramide-containing moisturizers?
- A. Decreases Propionibacterium acnes bacteria
- B. Reduces hyperpigmentation
- C. Restores lipid balance in the stratum corneum
- D. Increases keratinocyte proliferation
- 4. Which type of acne treatment is particularly recommended for patients using ceramide-containing moisturizers?
- A. Antibiotics
- B. Retinoids
- C. Benzoyl peroxide
- D. Salicylic acid
- 5. What is the advantage of using a ceramide-containing moisturizer in combination with acne treatments that tend to dry out the skin?
- A. Reduces the need for other acne treatments
- B. Prevents the rebound increase in sebum production
- C. Minimizes the risk of acne scarring
- Ensures that the skin remains hydrated and less prone to irritation