DOCTOR'S CORNER

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Introduction

Psoriasis is a chronic immune-mediated skin disease with red, scaly, itchy patches, affecting 2–3% of people globally, most often aged 15–35 years, but possible at any age.[1] Prevalence ranges from 0.14% in East Asia to 1.99% in Australasia, with incidence increasing from 92 per 100,000 individuals in 1990 to 99 per 100,000 in 2017.[2] All psoriasis types share inflammatory mechanisms, but differences explain variations in phenotypes and treatment responses.[1]

Role of ceramides in psoriasis

Psoriasis is a T-cell mediated inflammatory skin disease with attenuated epidermal barrier function. Psoriatic skin shows impaired barrier integrity with disturbed ceramide metabolism. Ceramides and their metabolites may exacerbate immune response. Earlier reports suggested unaltered total ceramides, but recent studies show that decreased ceramides are inversely correlated with Psoriasis Area and Severity Index (PASI) score.[3]

Clinical management

Clinical management of psoriasis aims to control disease activity, relieve symptoms, prevent recurrence, and improve quality-of-life (QoL), with effectiveness measured by PASI score.[2] Non-pharmacologic management includes lifestyle changes, sun exposure, and moisturizers.[1] Topical moisturizers increase hydration, decrease desquamation, improve skin appearance, enhance PASI-50 in conjunction with topical steroids, and delay relapse. A study of 33 psoriasis patients evaluated two ceramide-, salicylic acid–, and urea-based products (1. Cream, 2. Cleanser). Skin appearance improved in 72.7% of patients with the cream alone and 75.8% with the combined regimen. With the combined regimen, 84.8% of patients reported symptom relief and 90.9% noted softer, smoother skin. In a psoriasis relapse study, adjunctive skincare with ceramide cream twice-daily delayed relapse in 54.5% (20 days) and 71% (30 days).[4]

Pharmacologic management

Topical medications

Topical therapy is a key treatment approach for psoriasis. These medications offer rapid efficacy, enhance patient adherence, reduce adverse effects, and enable controlled, flexible dosing.[2] The commonly used topical agents and their characteristics are summarized in Table 1.[5,6]

Table 1. Summary of commonly used topical agents

Medication	Characteristics
Topical corticosteroids	• Reduce inflammation, erythema, scale, and hyperproliferation. Prolonged use causes tachyphylaxis, so it should be limited to short or intermittent use • Low-potency agents suit face/genitals; more potent corticosteroids needed for thick plaques on the scalp, elbows and knees, and palms and soles
Calcipotriol (Vitamin D analog)	• Antiproliferative, reduces plaque size, but may irritate and should be avoided on face, flexural areas, and groin; excessive use (>100 g/week) risks hypercalcemia
Emollients with or without keratolytics	• Daily use of fragrance-free emollients on thick plaques reduces scaling and discomfort • Emollients can be supplemented with keratolytics such as urea or salicylic acid; stronger concentrations of keratolytics are suitable for thick skin, but may sting on raw or broken areas

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Tar and dithranol	• Tar preparations (LPC creams, shampoos) reduce itch and scale, are cost-effective, and can be combined with corticosteroids • Dithranol (1%) short-contact therapy: Effective for thick plaques; may stain skin and light-colored hair
Topical retinoids	• Tazarotene treats psoriasis by reducing keratinocyte hyperproliferation and redness, aids remission, but may cause skin irritation • Combining with corticosteroids boosts efficacy and reduces steroid-induced atrophy by increasing epidermal thickness
Calcineurin inhibitors (tacrolimus and pimecrolimus)	• Steroid-free, suitable for long-term use in intertriginous areas, avoid skin atrophy; main side effect is local burning/tingling • Pimecrolimus: FDA-approved for adults and children >2 years; tacrolimus: 0.03% is for ages 2–15 years, while adults aged ≥16 years can use 0.03% or 0.1%

FDA: Food and Drug Administration; LPC: Liquor picis carbonis.

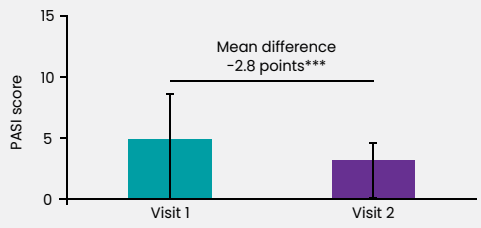
Systemic therapy is used for moderate-to-severe psoriasis or when topical treatments and phototherapy fail and includes oral immunomodulators and newer biologics. Biologics target key cytokines/receptors in psoriasis and are given by subcutaneous injections or intravenously. They offer strong efficacy and tolerability, but conventional systemic therapies remain common for lower cost, availability, and easier use.[6]

Clinical evidence

Impact of a ceramide-containing regimen on quality-of-life of patients with psoriasis[7]

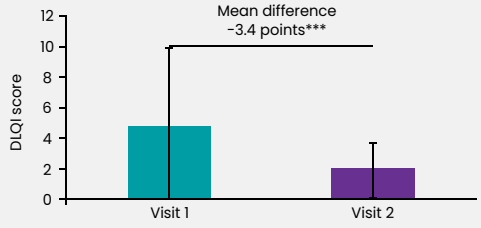
A multicenter, prospective study evaluated the benefits of a 4-week ceramide-containing regimen on psoriasis. In 97 patients, the regimen led to a 65.5% reduction in PASI score (Figure 1), 64.7% improvement in QoL (Figure 2), reduced need for concomitant therapies, high adherence, and no adverse reactions.

Figure 1. Mean PASI scores at the 1st and 2nd visits in patients with psoriasis



PASI: Psoriasis Area and Severity Index. ***p<0.001. n=71.

Figure 2. Mean DLQI questionnaire scores at the 1st and 2nd visits in psoriatic patients



DLQI: Dermatology Life Quality Index. ***p<0.001. n=57.

A ceramide-containing regimen reduced the symptoms commonly associated with psoriasis and improved patients' QoL.

References: 1. Chakith M R S, Pradeep S, Gangadhar M, *et al.* Advancements in understanding and treating psoriasis: A comprehensive review of pathophysiology, diagnosis, and therapeutic approaches. PeerJ. 2025;13:e19325. **2.** Gao Y, Xu T, Wang Y, *et al.* Pathophysiology and treatment of psoriasis: From clinical practice to basic research. Pharmaceutics. 2025;17(1):56. **3.** Li Q, Fang H, Dang E, *et al.* The role of ceramides in skin homeostasis and inflammatory skin diseases. J Dermatol Sci. 2020;97(1):2–8. **4.** Alexis A, Woolery-Lloyd H, Andriessen A, *et al.* Evolving concepts in psoriasis: Special considerations for patients with skin of color, skin barrier dysfunction, and the role of adjunctive skin care. J Drugs Dermatol. 2022;21(10):1054–1060. **5.** Chan JJ. Psoriasis: An update on topical and systemic therapies. Aust Prescr. 2025;48(3):87–92. **6.** Qasem SF, Ashkanani H, Ali A. Therapeutic advancements in the management of psoriasis: A clinical overview and update. Cureus. 2025;17(2):e79097. **7.** Abbad-Jaime de Aragon C, Berna-Rico E, Prieto L, *et al.* Improving the quality of life of patients with inflammatory skin diseases: A multicenter evaluation of a ceramide-containing regimen in patients with atopic dermatitis, psoriasis and xerosis. J Dermatolog Treat. 2025;36(1):2486702.

New technology

Prescription emollient device: A tailored solution for psoriasis in skin folds and sensitive sites

Psoriasis of sensitive areas and folds are clinically characterized by well-defined erythematous plaques with minimal or absent whitish scales. Management differs from plaque psoriasis because the different anatomical characteristics of these areas makes the skin more prone to local side effects. This prospective, randomized open-label clinical trial evaluated the efficacy and tolerability of a new prescription emollient device (PED) in the treatment of mild-to-moderate psoriasis of the sensitive areas and folds.

Study design and patients	• 30 patients (14 males and 16 females) with mild-to-moderate psoriasis of sensitive areas and folds
Sites involved	• Sensitive areas: Face, vulva, scrotum, pubic area, neck • Folds: Axillary fossa, intergluteal cleft, submammary/inguinal folds and umbilicus
Treatment protocol	• PED (cream), applied twice daily for 8 weeks • PED contained primarily furfuryl palmitate, tocopherol and dimethicone
Assessment and efficacy measures	• Efficacy was assessed at baseline, at 4 and 8 weeks • Efficacy measures: Degree of erythema, scaling, infiltration and pruritus using clinical, instrumental and subject-completed VAS assessments; IGA of efficacy performed at the end of the study

IGA: Investigator Global Assessment; PED: Prescription emollient device; VAS: Visual Analog Scale.

- Psoriasis of sensitive areas: At 8 weeks, significant reductions were seen in erythema (1.6±0.63 to 0.4±0.9; p=0.00001), desquamation (1.5±0.6 to 0.3±0.8; p=0.00001), scaling (1.4±0.9 to 0.5±0.9; p=0.01), and pruritus intensity (71.5±24.4 to 10.4±19.1; p=0.00001).
- Psoriasis of folds: At 8 weeks, significant reductions were seen in erythema (1.9±0.9 to 1±1.2; p=0.02), infiltration (1.9±0.9 to 0.9±1.2; p=0.01), and itch (85.6±9.7 to 17.5±23.3; p=0.00001).
- Investigator Global Assessment (IGA) efficacy- **Sensitive areas:** Clear in 7 and almost clear in 4 cases; **folds:** Clear in 5 and almost clear in 4 cases.
- Safety: No relevant side effects were reported in either group.

The study showed that the PED with antioxidant, anti-inflammatory, soothing, and occlusive agents may be a valid option for mild-to-moderate psoriasis of sensitive areas and folds, used as monotherapy or with pharmacological agents if needed.

Reference: Dall'Oglio F, Verzì AE, Guglielmi G, *et al.* A new prescription emollient device (PED) for psoriasis of sensitive areas and folds: A randomized prospective open trial. Psoriasis (Auckl). 2024;14:135–142.

GUIDELINE UPDATE

Expert recommendations on topical therapy for psoriasis

Experts from the Spanish Psoriasis Working Group (GPS) of the Spanish Academy of Dermatology and Venereology (AEDV) have developed a set of recommendations for the treatment of psoriasis. Table 2 shows the selection of recommended and alternative treatments for special locations and severe forms of psoriasis.

Table 2. Selection of treatment (recommended and alternative) for special locations and severe forms of psoriasis

Location or type of psoriasis	Recommended topical treatment and alternative (after "/")	Expected time to response
Scalp	Very high/high potency corticosteroids; calcipotriol/betamethasone dipropionate; combination of corticosteroids and salicylic acid; vitamin D analogs	4 weeks

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Skin folds	Medium/low potency corticosteroids; calcineurin inhibitors	2 weeks
Face	Medium/low potency corticosteroids; calcineurin inhibitors	2 weeks
Nail	Very high/high potency corticosteroids; calcipotriol/betamethasone dipropionate; calcineurin inhibitors or tazarotene	4 weeks
Palmoplantar	Very high/high potency corticosteroids; calcipotriol/betamethasone dipropionate; vitamin D analogs	4 weeks
Erythrodermic	Very high/high potency corticosteroids	4 weeks
Localized pustular	Very high/high potency corticosteroids	4 weeks

Topical drugs remain a fundamental treatment for psoriasis, and recent advances warrant re-evaluation of their role. A new framework has been developed to optimize topical therapy based on the best available evidence and expert experience.

Reference: Ribera M, Dauden E, Sahuquillo-Torralba A, *et al.* [Translated article] Expert recommendations on topical therapy for psoriasis from the Spanish Psoriasis Working Group (GPS). Actas Dermosifiliogr. 2025;116(7):T703–T730.

CONFERENCE UPDATE

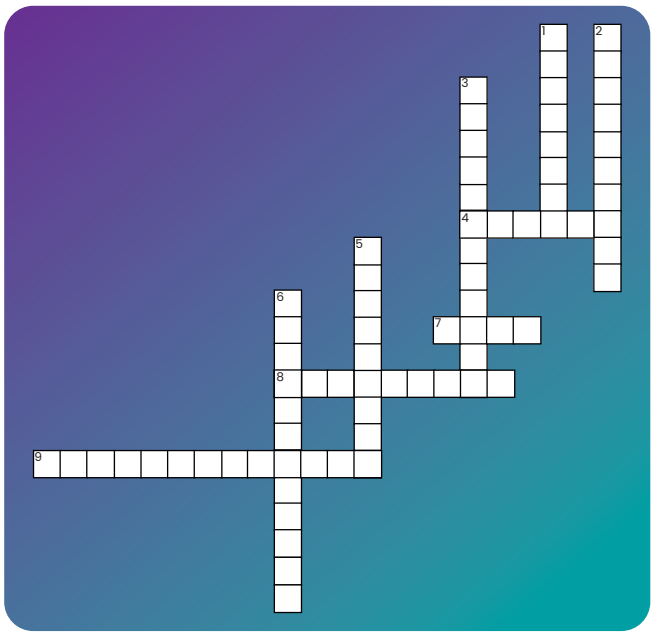
American Academy of Dermatology (AAD) Annual Meeting

Date: March 27–31, 2026
Location: Colorado, USA
Website:https://www.aad.org/member/meetings-education/am26

3rd International Conference on Dermatology & Skincare

Date: April 16-17, 2026
Location: Chicago, USA
Website: https://www.scitechseries.com/dermatology/program/scientific-sessions/psoriasis

CROSSWORD



ACROSS

4. Immune cells found in psoriatic plaques
7. Standard scoring tool for psoriasis severity (abbreviation)
8. Key lipids depleted in psoriatic skin
9. Common topical treatment class that reduces inflammation

DOWN

1. New prescription emollient device contained antioxidant _____ palmitate
2. Thickening of the epidermis seen histologically in psoriasis
3. Traditional systemic medication before biologics
5. Chronic skin disease with red, scaly patches
6. Topical vitamin D analog used in treatment

Answers:
Across 4. Tcells; **7.** PASI; **8.** Ceramides; **9.** Corticosteroids.
Down 1. Furfuryl; **2.** Acanthosis; **3.** Methotrexate; **5.** Psoriasis; **6.** Calcipotriol.