Biologic agents have revolutionized the management of psoriasis over the past seven years. While these important therapeutic agents are associated with impressive efficacy and good overall safety, they are indicated for management of moderate to severe psoriasis. As such, this treatment is reserved for a minority of those five million Americans affected by psoriasis. Furthermore, since complete clearance is not always achieved with a biologic agent, most patients who receive biologic therapies continue to use adjunctive topical therapies.

As such, topical interventions for psoriasis remain important and represent a focus of continued attention. Topical corticosteroids are a mainstay of topical therapy, although concerns about side effects (notably skin atrophy and HPA axis suppression) and misuse persist. Nonetheless, they tend to confer a rapid onset of action and are relatively inexpensive, making them preferred agents for acute treatment.

Topical vitamin D analogs represent another important topical treatment option for psoriasis. These agents have efficacy similar to topical corticosteroids, though the onset of effect may be relatively longer. Use of topical vitamin D analogs in conjunction with corticosteroids is common, based on the expectation that the corticosteroid will provide rapid clearance while the vitamin D analog will be used for long-term maintenance.

Finally, moisturizers and keratolytics have been cornerstones of all topical treatment regimens, though they historically have been thought to confer only symptomatic relief of dryness, scaling, and mild pruritus. New evidence suggests molecular bases by which moisturizers—specifically barrier repair creams—may modify the course of psoriasis.

The Case for Moisturizers
Frequent application of moisturizers has been standard in the management of psoriasis. Only recently have studies documented the therapeutic benefit of their use for the condition. In one four-week study, patients with mild to moderate plaque psoriasis (five to 10 percent body surface area) who either were not being treated or had discontinued the use of all topical psoriasis medications and all other moisturizers were directed to use a standard moisturizing cream (Cetaphil Moisturizing Cream, Galderma) for four weeks. No other topical moisturizers or medications were permitted. Objective measures of barrier function were obtained by assessment of skin barrier function through transepidermal water loss (TEWL), skin hydration through corneometry, and desquamation through the use of sticky tape corneocyte counts (D-SQUAME) at baseline and at the end of four weeks. Thirty participants were enrolled. Use of moisturizer alone prevented further damage to the skin barrier, as no significant change in TEWL was seen over four weeks. Skin hydration increased over the course of the study, and in a significant number of patients, skin improved from very dry to dry or normal. Other researchers have noted that moisturizers, particularly lipid-rich formulations, can have steroid-sparing effects and can confer therapeutic effects in psoriasis and atopic dermatitis.

Moisturizers may confer therapeutic benefit by supporting epidermal barrier repair. Evidence confirms that psoriasis is a disease that manifests barrier dysfunction. For example, proteases within the epidermis help to regulate desquamation and modulate defense molecules in the human epidermis, but a shift in the balance of proteases is associated with the develop-
ment of inflammation, as signified by redness, scaling, and itching of psoriasis and other dermatoses. Proinflammatory cytokines naturally found in the epidermis have also been implicated in early psoriasis.

Choosing Moisturizers

Because psoriasis is being recognized as a disease manifesting barrier dysfunction, patients must be counseled to avoid any topical products that may be associated with further degradation of the barrier, including fragrances and known irritants. The notion of therapeutic moisturizers, defined as those proven in clinical trials to be both compatible with topical therapies and biocompatible with the skin, emerged early in the last decade to describe topical formulations that not only improve the signs and symptoms of dry skin but also help maintain hydration and overall integrity of the stratum corneum. True “therapeutic moisturizers” are also noncomedogenic, devoid of irritant ingredients, and compatible with many therapeutic regimens.

In this decade, the emergence of barrier repair creams has evolved the notion of the therapeutic moisturizer. Barrier repair creams contain lipids and ceramides and may be formulated specifically to restore these to the epidermal barrier to promote barrier repair and healthy functioning.

Because they contain no drugs, are not associated with side effects, and are safe for long-term use, barrier repair creams may represent an ideal, long-term intervention for patients with psoriasis. By supporting normal barrier function, these creams may help to delay or prevent psoriasis flares. These agents are compatible with other topical therapies and may therefore be safely combined with topical corticosteroids and/or vitamin D analogs to potentially increase therapeutic response.

Data indicate that certain barrier repair formulations may provide efficacy similar to that of low- to medium-potency topical corticosteroids. In a prospective, randomized, investigator-blinded, active-controlled multicenter study of subjects with atopic dermatitis, EpiCeram was shown to have efficacy similar to a mild topical corticosteroid:

- Patients in the EpiCeram BID arm and those in the fluticasone propionate 0.05% BID arms achieved similar improvements in SCORAD and reported similar reductions in pruritus at day 28.

Based on the evidence that it may have similar efficacy to a topical corticosteroid, in clinical experience EpiCeram Emulsion was tried for the primary management of psoriasis in a patient who deferred the further use of topical corticosteroid therapy and was not a candidate for phototherapy, systemic, or biological treatments. The patient presented with mild plaque psoriasis involving the lateral aspects of the legs. EpiCeram applied BID for two weeks produced significant reduction in erythema, scale, and thickness of psoriatic plaques, and reduction of pruritus.

Dr. Bikowski is a consultant and has served on the Advisory Board and Speakers Bureau for Promius Pharma. He has served on the Advisory Board, Speaker’s Bureau, and has consulted for Galderma.


Patient is shown upon presentation with mild plaque psoriasis affecting the lateral aspects of the legs (left) and following two weeks of BID application of EpiCeram Emulsion (right).