

## Back to Basics: Local Care for Skin Disease

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A 90-year-old man was admitted to the hospital from the emergency room with an abscess on his toe. His workup included blood cultures, complete blood counts, and a metabolic panel but did not include a Gram stain or culture of the abscess. Upon arrival to the medical ward, intravenous antibiotics, systemic hydration, several radiographs and scans, and a myriad of additional blood tests followed, but no local care to the toe was given. While the patient pointed out that his skin was dry and might fissure, creating sites of possible secondary infection, no moisturizing lotions were offered.

Is this unusual? We all see patients who have infections or dry skin in which aggressive systemic medications are initiated with little attention paid to local care. Patients often agree they have dry itchy skin, then offer that they drink a lot of water to counteract these symptoms, but it just does not seem to be working! Administrative barriers to the in-office examination of pus and scale by Clinical Laboratory Improvement Amendments regulations provide challenges to such evaluations. Whether due to misunderstandings, oversight, governmental intrusion into patient care, or the thought that systemic medication must be the strongest most aggressive care (and thus the best available), at times local skin care is not instituted.

Gram-negative toe web infection is a disease in which attention to the microenvironment is as necessary as systemic antibiotics for cure. Sure, a culture consisting of *Pseudomonas*, *Escherichia coli*, and often 2 or 3 other similar organisms sounds imposing; however, high humidity is required for their survival. Simply drying the environment with pledgets placed between the toes and the use of a fan will kill bacteria as assuredly as ciprofloxacin hydrochloride. Similarly, measures aimed at

altering the skin's local ecology are beneficial both in the treatment and prevention of conditions such as intertrigo, inframammary candidiasis, tinea pedis, and pitted keratolysis.

When diagnosing infection, smears of pus usually will reassure us that *Staphylococcus* is the cause of the infection in abscesses but occasionally can reveal odd invaders mimicking this common infection, such as deep fungal infections or Gram-negative organisms. Tzanck tests and potassium hydroxide examinations continue to be a mainstay of the dermatologic examination. "When it scales, scrape it," remains great advice.

Dermatologists understand the importance of local care. We help patients through our understanding, bedside testing, simple local measures, and education. Another helpful strategy to insure the best care for patients is to continue skin care even after initiation of aggressive oral therapy for conditions such as psoriasis, atopic dermatitis, nummular eczema, blistering diseases, and photoinduced conditions such as connective tissue disease or chronic actinic dermatitis. This care may limit the dose of systemic medication required, continues to stress the importance of skin care to the patient, allows for earlier and smoother transition off of oral medication to topical care and helps prevent recurrence.

Just as we always insist on the daily use of sunscreens and sun avoidance when beginning anti-malarials for cutaneous lupus erythematosus, the continued use of topical anti-inflammatories such as tacrolimus ointment or corticosteroid creams often will help limit the dose of oral medication required.<sup>1</sup> Often, diseases are easily 90% controlled with a certain amount of a systemic agent, but to get that last 10% suppressed may require another full doubling of the oral dose. Ensuring continued topical therapy is being applied can prevent the need for this push to clearance, as topicals may accomplish it. In the treatment of severe atopy, tapering of oral steroids, cyclosporin, azathioprine, or mycophenolic

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acid clearly is facilitated by the use of topical measures. Continuing to educate our patients on the importance of moisturizers, as well as the detrimental effects of soap and wetting and drying, helps our atopic and aging xerotic patients avoid flares and exposure to the side effects of systemic medications. Soak and smear therapy is especially useful in either preventing the need for oral therapy or helping to limit the dose.<sup>1</sup>

As we head off to clinic continuing our quest for smooth lesion-free skin, let us keep in our bag

of tricks the scalpel blade, potassium hydroxide, Gram stain, Tzanck preparation, microscope, ointments, creams, lotions and solutions, sunscreens, and drying agents! While other caregivers might not appreciate the elegance of this simplicity, our patients benefit from it, and we dermatologists revel in it!

#### REFERENCE

1. Gutman A, Sciacca J, Kligman A, et al. Soak and smear therapy. *Arch Dermatol*. 2005;141:1556-1559.