

Spray, slather, dab or dip? Topical Management for Allergies

Julia Miller, DVM, DACVD

Animal Dermatology Clinic, Louisville, KY

Topical therapy is central to managing common small animal dermatologic conditions, including allergic dermatitis, bacterial and *Malassezia* dermatitis, wounds, sebaceous adenitis, and routine “dirty dog (and cat)” maintenance. Success depends on matching formulations to lesion distribution and owner capability, with emphasis on adequate frequency and contact time to optimize clinical outcomes.

Shampoos provide the backbone of generalized therapy, with typical bacterial pyoderma requiring bathing 1–2 times weekly and resistant cases requiring up to daily use, maintaining 5–10 minutes of contact before rinsing. Mousses, sprays, and wipes are well-suited for focal lesions and skin folds (interdigital spaces, facial and tail folds, axillae), improving practicality when full bathing is difficult. Spot-ons, creams, ointments, and medicated collars enable targeted or whole-body delivery for barrier support, anti-inflammatory control, and antimicrobial action, although ointments should be avoided on oozing lesions.

In allergic dermatitis, three pillars guide topical management: improving the epidermal barrier, reducing inflammation, and controlling surface microbes. Atopic dogs often have ceramide deficiency, predisposing to transepidermal water loss and allergen penetration; barrier-enhancing products containing lipids, ceramides, essential fatty acids, ophytrium, Biosfeen, and related actives (in shampoos, mousses, sprays, and spot-ons) help restore barrier function.

Representative examples include Dechra Dermallay/Dermalyte, Dermoscent Essential 6 and Atop 7, Douxo S3 SEB/Pyo/Calm, Virbac Allermyl, and associated mousses and sprays, along with barrier-focused spot-ons such as Dermoscent Essential 6 and Dechra Atopivet Spot-on.

Focal topical anti-inflammatories are useful for induction and then intermittent maintenance, but steroid potency must be chosen carefully to avoid local Cushingoid changes, skin thinning, comedones, milia, recurrent infections, and complications from licking or periocular use. Lower-potency steroid products (e.g., Genesis, TrizChlor4HC, Zymox spray, Dermabliss anti-itch spray) offer safer long-term options. For bacterial pyoderma and methicillin-resistant *Staphylococcus pseudintermedius* (MRSP), aggressive topical management is critical, using chlorhexidine (2–4%, with $\geq 3\%$ providing antifungal and enhanced MRSP activity), sodium hypochlorite, silver, benzoyl peroxide, essential oils, hypochlorous acid solutions, lime sulfur dips, and Dakin’s solution in shampoos, sprays, mousses, wipes, spot-ons, and ointments, supported by data showing high rates of secondary bacterial and *Malassezia* infections in atopic dogs

Malassezia dermatitis is addressed with azole-containing topicals such as MiconHexTriz, KetoHex, KetoChlor, Malaseb, TrizChlor4, and Douxo Pyo, recognizing that durable yeast control requires simultaneous control of inflammation. Allergic cats similarly benefit from topicals for eosinophilic plaques and granulomas, using mild steroids, antimicrobials, wound-

healing agents, and barrier support (spot-ons and collars). Chronic dermatoses that behave like wounds may respond to amorphous silicate nanoparticle barrier creams delivering orthosilicic acid, which modulate growth factors, promote collagen and elastic fiber production, reduce proinflammatory interleukins, and decrease fibrosis and scarring, including in equine distal limb wounds.

Sebaceous adenitis, characterized by dull, brittle coat, loss of curl, color change, marked hair casting, and recurrent Staphylococcal or Malassezia infections, is diagnosed by biopsy and clinical pattern, and managed with moisturizers, barrier-supportive spot-ons and collars, and keratolytic shampoos such as Douxo S3 SEB, DermaBenSs, and Virbac Keratolux.

Across diseases, product choice must consider the individual patient, lesion distribution, and owner willingness and ability, as ease of use strongly predicts compliance and clinical success. Core principles include selecting products that owners will reliably use, providing clear demonstrations and instructions, encouraging routine preventive use with intensified application during flares, and recognizing that effective prevention reduces recheck frequency. Cytology—rapid, inexpensive, and highly informative—is emphasized as an essential diagnostic tool to confirm whether bacteria, yeast, parasites, or other processes are truly present before committing to or modifying topical therapy