

American Academy of Dermatology and National Psoriasis Foundation guidelines of care for the management and treatment of psoriasis



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The Joint American Academy of Dermatology (AAD)—National Psoriasis Foundation (NPF) guidelines of care for the management and treatment of psoriasis with topical therapy and alternative medicine appear in this issue of the *Journal* and will serve as a valuable tool to guide therapy and help improve patient outcomes. AAD clinical guidelines reflect the best current evidence as well as the judgment of expert clinicians. Experts in the field of psoriasis are commonly involved in clinical trials and may have conflicts of interest, and all appropriate steps are taken to resolve conflicts in accordance with standards set by the Council of Medical Specialty Societies so that we can place full confidence in the published recommendations. The guidelines address important comorbidities, use in pregnancy, and special considerations related to problematic body sites, such as the face, scalp, nails, and intertriginous areas that may require changes in the therapeutic approach. They balance the need for efficacy with the risk of unintended consequences, such as adrenal axis suppression, osteonecrosis, glaucoma, and atrophy.

Key recommendations include limiting the use of class 1 corticosteroids to no more than twice daily for ≤ 4 weeks when possible, intermittent pulse dosing, and combining treatment with nonsteroidal agents to improve efficacy and reduce the risk of morbidity. They advise caution when ultra-high-potency or high-potency steroids are used over large surface areas or under occlusion for > 4 weeks. I would add that some data not referenced in the guideline suggest that when steroid receptors are fully saturated they can remain so for prolonged

periods through continual drug delivery from the stratum corneum reservoir. The simple experiment of occluding clobetasol ointment on the forearm overnight can demonstrate vasoconstrictive effects for > 24 hours, suggesting that when skin penetration is good daily applications may produce effects comparable to twice daily application at half the cost and with less systemic absorption. Milder corticosteroids can also demonstrate prolonged effects once steroid receptors achieve good saturation.¹ Intermittent pulse dosing may be useful to reduce the risk of growth retardation in children who require prolonged courses of topical corticosteroids.² Attention should be paid to the vehicle, with some enhancing absorption, hydration, or cosmetic acceptability.³⁻⁵ Patient preference for vehicle is highly variable and influences compliance.⁶ This, of course, translates directly to patient outcomes.

The guidelines remind us that nonsteroidal agents, such as tazarotene, vitamin D analogues, and off-label topical calcineurin inhibitors, can be combined with topical corticosteroid therapy or used in place of corticosteroids when the risk of atrophy is high. Application of vitamin D analogues during the week with high-potency topical steroids twice daily on weekends may be suitable for maintenance therapy, and Goeckerman therapy remains a valuable option in the treatment of psoriasis along with other forms of phototherapy. Finally, the guidelines recommend the use of body surface area and physician global assessment along with other measures of symptoms and quality of life and emphasize the role of patient preference and the patient's own

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assessment of efficacy. It is the patient who must ultimately live with the burden of ongoing disease, and their preferences should be key to decision making. We hope that readers find the guidelines useful in clinical practice as well as advocacy efforts on behalf of our patients.

REFERENCES

1. Cevc G, Blume G. Hydrocortisone and dexamethasone in very deformable drug carriers have increased biological potency, prolonged effect, and reduced therapeutic dosage. *Biochim Biophys Acta*. 2004;1663:61-73.
2. Heuck C, Ternowitz T, Herlin T, Wolthers OD. Knemometry in children with atopic dermatitis treated with topical glucocorticoids. *Pediatr Dermatol*. 1998;15:7-11.
3. Greive KA, Barnes TM. Bioequivalence of 0.1% mometasone furoate lotion to 0.1% mometasone furoate hydrogel. *Australas J Dermatol*. 2016;57:e39-e45.
4. Senyigit T, Padula C, Ozer O, Santi P. Different approaches for improving skin accumulation of topical corticosteroids. *Int J Pharm*. 2009;380:155-160.
5. Stoughton RB. Penetration of drugs through the skin. *Dermatologica*. 1976;152(suppl 1):27-36.
6. Felix K, Unrue E, Inyang M, et al. Patients preferences for different corticosteroid vehicles are highly variable. *J Dermatolog Treat*. 2020;31:147-151.