

Addressing the Challenge of Topical Steroid Withdrawal

Now more widely reported, topical steroid addiction should compel all prescribers to reflect on their use of topical corticosteroids.

BY PETER A. LIO, MD

Topical corticosteroids (TCS) have a unique and storied history, with roots beginning in the late 1940s as “compound E” and “compound F.”¹ After more than 60 years of clinical use, their many benefits—as well as their adverse event profiles—are well documented and addressed in myriad papers and published guidelines. Yet, despite this long and robust history, topical corticosteroid withdrawal (TSW) presents questions that have not fully been explored in the literature.

Also known as Red Skin Syndrome and topical steroid addiction, TSW has been reported in increasing numbers in recent years. Notably, there has been a significant patient-driven movement to promote awareness using letters, social media, and even online educational videos.² Perhaps one of the reasons why TSW is so elusive is that it can be very difficult to distinguish from eczema itself—this is part of what makes it so challenging to address. Recent studies have explored TSW, raising compelling questions that all who regularly prescribe these agents should consider.

STEROID WITHDRAWAL: A REVIEW

The concepts of addiction, dependence, and withdrawal are well-established in other areas of medicine, but remain somewhat murky here. With topical corticosteroids, even the possibility for the more basic principle of tachyphylaxis—as they are used over time they become less effective—has been more-or-less debunked.³ In other inflammatory dermatoses, such as psoriasis, vitiligo, and lichen planus, there also tends to be chronic intermittent use of very potent topical steroids, and TSW does not seem to be commonly seen or reported in these contexts, further confusing the issue.

Findings of a task force from the National Eczema Association (on which I served as an investigator) were recently published in the *Journal of the American Academy of Dermatology* and are worth discussing.⁴ In a systematic review of current literature we found that steroid withdrawal was reported mostly on the face and genital area of women primarily in the setting of long-term inappropriate use of potent TCS. Common symptoms included burning and stinging, and the most common sign was erythema.

Additionally, we identified two subtypes of topical steroid withdrawal syndrome: papulopustular and erythematooedematous, with the former being more rosacea-like, and the latter presenting with burning, redness, and edema. In both subtypes, however, we noted that withdrawal is likely a distinct clinical adverse effect of misuse. Patients and providers should be aware of its clinical presentation and risk factors.

CLINICAL IMPLICATIONS

Although we are still in the early stages of grappling with the frequency and effects of topical steroid withdrawal, these findings are significant. Awareness is key to understanding and preventing topical steroid withdrawal, but this phenomenon should implicitly prompt reflection on when and how we use these agents. When treating eczema, we should consider everything in our power to calm the skin, restore it, and protect it. This includes avoiding triggers, using moisturizers to support and strengthen the skin barrier, dilute bleach baths to decrease bacterial colonization, and eczema action plans that can help delineate when and where to use more powerful medications and when to stop. In a perfect world, we could absolutely minimize or avoid

altogether the use of topical corticosteroids. While this may be possible in milder cases, for more severe cases using some topical steroids seems to be unavoidable given our current understanding of eczema and our relatively limited therapeutic options.

Experience suggests that an effective strategy for administering TCS therapy is to use them in brief bursts (ideally less than two weeks) to calm things down and then take a break of roughly equal time. During this time, other agents such as topical calcineurin inhibitors can be used to maintain the skin and prevent flares. This can help break the scratch-itch cycle and reduce the inflammation in the skin while avoiding epidermal atrophy and skin barrier dysfunction related to longer-term TCS use.⁵ Presumably, such cautious intermittent use will also minimize the risk of TSW. Close follow up remains critical: for patients who are unable to sufficiently improve or remain clear, moving to the next rung of the therapeutic ladder is imperative, rather than simply settling for daily use of TCS.⁶

One can think about TCS therapy by way of analogy. Consider, for example, opiates such as codeine, morphine, or oxycontin. These are highly addictive agents that can clearly ruin some individuals' lives. Nevertheless, people in pain should be able to use them carefully and safely for short periods. In fact, it is only the tiniest minority who becomes addicted to them, and it would be unjust and unfortunate to deny the many patients in need of relief because of that small risk. For those fortunate enough to not need these medications, total avoidance may be possible. However, for patients who are truly suffering, medications of all sorts have been developed to ease suffering and give relief. Perhaps we should think of TCS for eczema in a similar way. With proper guidance, respectful usage, and close monitoring, it seems that the vast majority of patients can use topical steroids briefly when needed, and then be steroid-free with very little risk and great benefit.

For those suffering with topical steroid addiction/withdrawal, we should work to maximize all of our other non-corticosteroid treatments, from antihistamines to phototherapy and beyond—along with lots and lots of support—to help get through it. Systemic cyclosporine also may be helpful in cases where TSW is present but atopic dermatitis is still raging elsewhere and needing control. Nerve calming preparations such as topical pramoxine, oral gabapentin, and even simple cooling techniques with cool compresses, wet wraps, and even mineral water sprays can work together to offer relief in aggregate for these unfortunate patients.

And, looking forward for patients with AD in general, focusing on moisturization, antimicrobial treatments such as dilute bleach baths, using action plans to help clarify how to use medications, avoiding triggers, and using other non-steroidal anti-inflammatory treatments such as topical calci-

neurin inhibitors to minimize TCS use should help prevent further cases of TSW.

CONCLUSION

Atopic dermatitis is a pretty terrible disease. Untreated or under-treated, it can cause significant morbidity including terrible itch, disrupted sleep, infections, and pain. Developmental and behavioral issues also may arise due to AD, resulting in significant impact on the quality of life.⁷ All of these underscore the idea that AD needs to be treated, but it must be treated safely and in a way that minimizes adverse effects from the therapies themselves. While TSW may be more common than we yet know, it seems to be preventable in at least the majority of cases. This gives hope that with widespread recognition of TSW and cautious use of topical corticosteroids, we can take better care of our patients than ever before and hopefully send TSW back into obscurity. ■

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