Perianal Ulcerations From Topical Steroid Use

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Topical steroids play an extremely important role in the treatment of various dermatologic conditions. Use of topical steroids must be approached with caution, however, as they can have serious side effects. We report a case of iatrogenic perianal ulcers caused by twice-daily application of Lotrisone® (clotrimazole and betamethasone dipropionate) in the perianal region. High-potency topical steroids should be used sparingly and briefly in intertriginous areas.

Prolonged steroid use is associated with myriad side effects. The most frequent side effect of topical steroid administration is skin atrophy.[1-3] Topical steroids also may induce striae,[2] telangiectasias, purpura, abnormal pigmentation, milia, hypertrichosis, perioral dermatitis, contact dermatitis, acne, photosensitivity,[3] and ulcers.

Any diagnosis for which topical steroids are prescribed must be accurate, in large part because the intervention is not entirely benign. Clinically, dermatophyte infections can be confused with noninfectious subacute dermatoses. Many physicians may decide to forgo a proper investigation and institute a treatment combining a topical steroid and antifungal agent. This approach can lead not only to inadequate resolution of symptoms but also to serious undue side effects.

Case Report

A 60-year-old morbidly obese man with diabetes presented with a 3-month history of a pruritic perianal cutaneous eruption. Results of a complete review of systems were unremarkable. On physical examination, 2 symmetrical, erythematous, indurated, deeply ulcerated plaques were found extending from the anal margin to both medial buttocks (Figure 1). Clinical differential diagnoses included chronic herpes simplex virus infection, cytomegalovirus infection, fungal infection, bacterial infection, extramammary Paget disease, metastatic Crohn disease, and metastatic or primary neoplasm (eg, squamous cell carcinoma).

A diffuse mixed infiltrate of neutrophils, lymphocytes, and histiocytes was seen on histopathologic examination; this infiltrate is consistent with a nonspecific chronic ulceration. Lack of ballooning degeneration, Paget cells, granulomas, and atypical cells ruled out viral infection, extramammary Paget disease, metastatic Crohn disease, and neoplasm, respectively. Results of tissue cultures were negative for viruses, bacteria, fungi, and atypical mycobacteria. Findings from a flexible sigmoidoscopy examination were normal.

On questioning, the patient indicated that, 3 months earlier, he had been given Lotrisone® (clotrimazole and betamethasone dipropionate) for presumed candidal intertrigo. He had continually applied this ointment, which combines a potent topical steroid and an antifungal agent, twice daily to the intergluteal folds. The occlusive nature of this anatomical location had led to an increase in the potency of the steroid. The topical steroid was discontinued. The patient applied polysporin ointment daily to the ulcers and covered them with gauze impregnated with petroleum jelly. After 3 months, the ulcers were healed (Figure 2).

Comment

Topical steroids may have serious side effects. Adverse side effects of betamethasone dipropionate 0.05% and other steroids include striae,[2] telangiectasias, purpura, abnormal pigmentation, milia, hypertrichosis, perioral dermatitis, contact dermatitis, acne, photosensitivity,[3] atrophy,[1,3] and ulcers. Further, topical steroids can potentially suppress the hypothalamic-pituitary-adrenal axis, especially when used on large surface areas and under occlusion.[4-7]

Extreme caution is warranted when using high-potency topical steroids in intertriginous areas. Treatment should never be prolonged. Many

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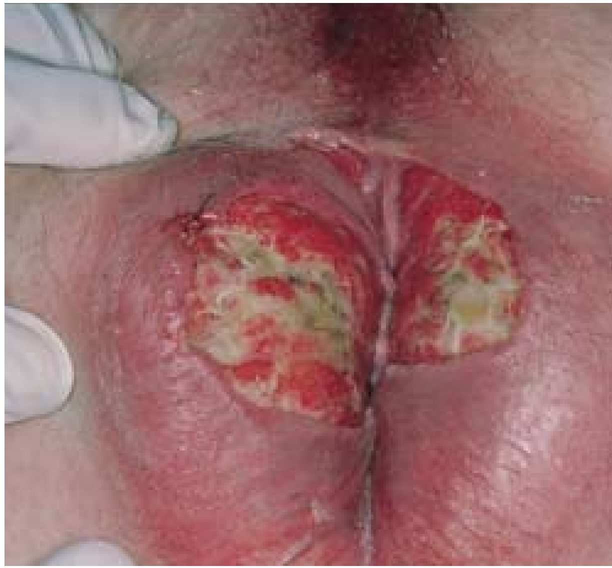

Figure 1. Two well-defined clean-based ulcers involving the perianal region and extending to both buttocks.

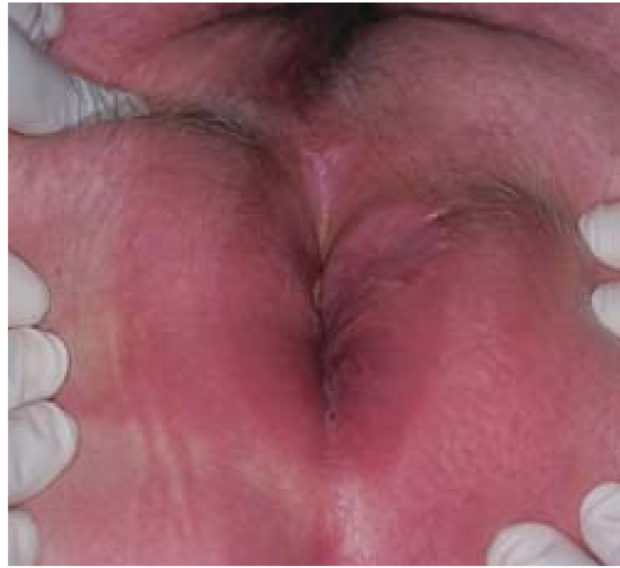

Figure 2. Three months after discontinuation of Lotrisone® (clotrimazole and betamethasone dipropionate), the ulcers were nearly resolved.

authors have recommended brief (≤2 week) use of potent topical steroids.[5,6] Issuing repeated prescriptions is highly discouraged.[5,6] Some authors have condemned the use of superpotent steroids in anatomically occluded areas.[5-7] Additionally, if potent topical steroids are used, or if topical steroids are used under occlusion (synthetic or anatomical), it is of utmost importance that the physician examine the treated area frequently to ascertain and treat any side effects inherent to their use.[6]

Although topical steroids play an important role in the treatment of cutaneous disease, a logical, prudent, and planned approach to their use is paramount. Reducing inappropriate use of topical steroid preparations is an important step in decreasing the incidence of side effects. An eruption in the groin, similar to any other cutaneous eruption, should be logically approached. Foremost, a definitive diagnosis should be made before any therapy is administered. Diagnostic procedures, including potassium hydroxide examination and biopsy, can aid the clinician in determining a precise diagnosis. After an accurate diagnosis, dermatophyte infections can be effectively treated with antifungal preparations, whereas various types of dermatitic eruptions can be effectively treated with topical steroids.

Occasionally, dermatophyte infections are effectively treated with topical steroids in combination with antifungal preparations. Topical steroids can reduce the erythema and pruritus associated with fungal infections.[7-9] However, some have suggested that long-term use of topical steroids may allow fungal organisms to grow more rapidly.[7-9] Again, if a physician treats dermatophyte infections with combination therapy, careful attention must be paid to the strength, amount, and duration of topical steroids used. Potent topical steroids should not be used indiscriminately in the groin or in any anatomically occluded area, especially when a definitive diagnosis is lacking.

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