Effectiveness of Topical Steroid Cream in Managing Hypergranulation in Complex Wound Healing: A Case Study

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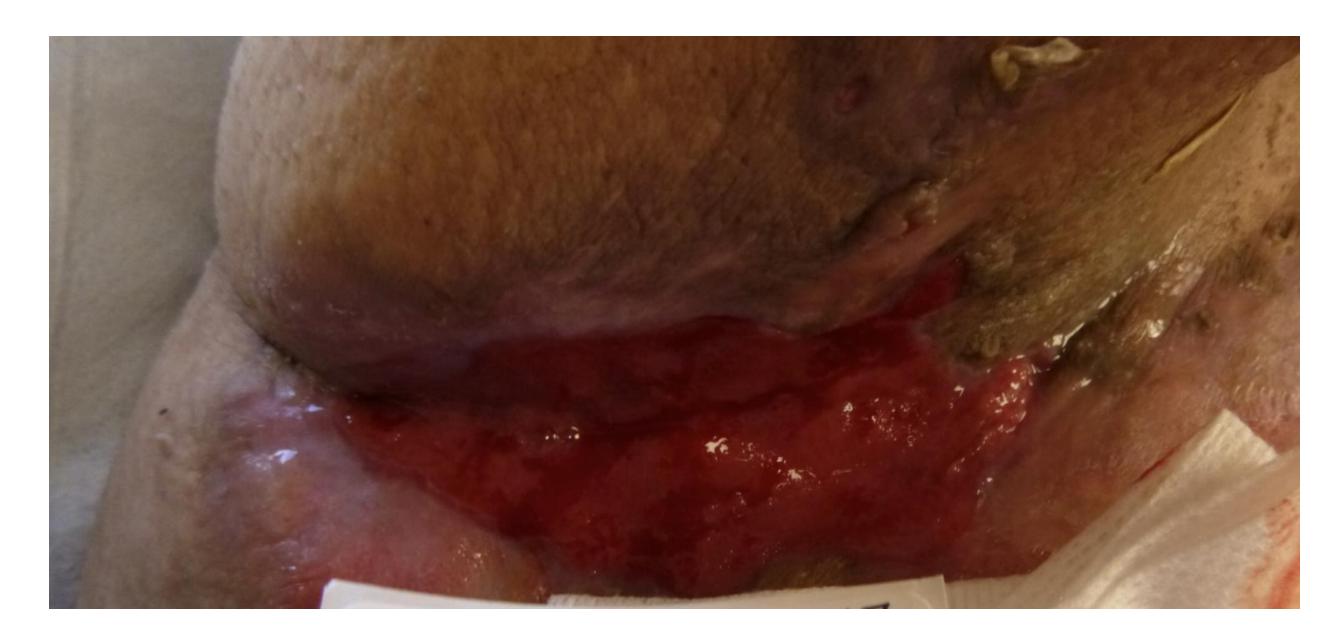
Objective

To evaluate the role of topical steroid cream (clobetasol) in managing persistent hypergranulation tissue in a complex wound healing scenario of Hidradenitis Suppurativa (HS)

Introduction

Hidradenitis suppurativa (HS) is a chronic inflammatory skin disease that leads to painful nodules, abscesses, and scarring, often requiring surgical management.

Postoperative wound healing can be difficult, especially in patients with diabetes and obesity, and may be complicated by persistent hypergranulation tissue, which delays epithelialization and increases infection risk. Traditional treatments, such as mechanical or chemical debridement, can be painful and costly. Emerging evidence suggests that topical corticosteroids offer a painless, cost-effective alternative by promoting resolution of hypergranulation. This case highlights the successful use of topical clobetasol to enhance wound healing in a complex HS patient.



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Case Study

A 35-year-old male with long-standing Hurley stage II HS of the axillae presented after a prior incision and drainage procedure. He had multiple chronic draining sinus tracts and a large axillary wound that developed exuberant pink, friable granulation tissue despite routine wound care. Empiric silver nitrate cautery had produced no improvement. In our clinic, we applied 0.05% clobetasol propionate ointment directly to the hypergranulation tissue twice weekly. The wound was dressed with non-adherent gauze and changed daily. The patient was followed weekly: wound dimensions, granulation appearance, and pain were recorded. No systemic antibiotics were given concurrently.



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Results

Topical clobetasol led to a noticeable reduction in hypergranulation within one week. Over eight weeks, the wound showed decreased exudate, accelerated epithelialization, and a steady reduction in size. Laboratory markers improved, and the patient reported less pain. Complete wound closure was ultimately achieved without complications.



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Discussion

Excess granulation tissue (HGT) in wounds impedes epithelial migration and prolongs inflammation. In HS, surgical or spontaneous wounds often hypergranulate (≈62% in one series) and benefit from intervention. Potent topical steroids like clobetasol counteract granulation by suppressing fibroblast proliferation and inflammation. Unlike standard therapies, steroids are painless and tissue-sparing. In our case, clobetasol rapidly quelled HGT, mirroring pediatric and surgical reports of steroid efficacy. This facilitated faster closure of the HS wound while preserving healthy tissue, suggesting that topical steroids can effectively address the aberrant healing seen in HS.

Conclusion

Our findings demonstrate that the targeted use of a high-potency topical steroid—integrated into a comprehensive, multimodal treatment regimen—can effectively reduce hypergranulation, enhance epithelialization, and ultimately achieve complete wound closure in HS. This approach not only proved cost-effective and pain-free compared to more invasive methods, but also provided significant improvements in wound healing in a patient with challenging comorbidities. While this report is based on a single case, these encouraging results suggest that topical steroid therapy merits further investigation as a valuable adjunct in the management of complex wounds associated with HS.

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