Intralesional triamcinolone for flares of hidradenitis suppurativa (HS): A case series

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Background: Hidradenitis suppurativa (HS) is a chronic inflammatory disease of the hair follicle. Standard practice of managing acute flares with corticosteroid injection lacks scientific evidence.

Objective: We sought to assess the outcomes of routine treatment using intralesional triamcinolone (triamcinolone acetonide 10 mg/mL) in the management of acute flares in HS.

Methods: This was a prospective case series evaluating the effect of intralesional corticosteroids for alleviation of acute flares in HS. Physician- and patient-reported outcomes were noted.

Results: Significant reductions in physician-assessed erythema (median score from 2-1, $P < .0001$), edema (median score from 2-1, $P < .0001$), suppuration (median score from 2-1, $P < .0001$), and size (median score from 3-1, $P < .0001$) was demonstrated at follow-up. A significant difference in patient-reported pain visual analog scale scores occurred after 1 day (from 5.5-2.3, $P < .005$) and from day 1 to day 2 (from 2.3-1.4, $P < .002$).

Limitations: Small study size, open single-arm design, and short follow-up time are the limitations of this study.

Conclusion: Intralesional injection of corticosteroids is perceived as beneficial by physicians and patients in the management of HS flares by reducing pain after 1 day and signs of inflammation approximately 7 days later. (J Am Acad Dermatol 2016;75:1151-5.)

Key words: acne inversa; corticosteroids; hidradenitis suppurativa; inflammation; intralesional; skin disease; triamcinolone acetonide.

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Hidradenitis suppurativa (HS) has an estimated prevalence of 1% to 2%,[1,2] with a higher frequency in the overweight population (body mass index >30), in females,[1] and in smokers.[3] Objectively, the disease presents with inflamed nodules, boils, sinus tracts/tunnels, and tombstone-comedos in the intertriginous areas such as the axilla, groin, perineal areas, and under the breasts.[1] Rupture of the outer root sheaths and an intense inflammatory response are considered important pathogenic events in HS.[1]

Clinically, flares of painful nodules are a hallmark of HS. These nodules interfere with everyday life, reducing not only quality of life,[4,5] but also causing missed days from work.[5,6] Nodules may develop into abscesses, further complicating the patient's situation by additional pain and malodourous discharge.

CAPSULE SUMMARY

- Although recommended in the literature, the effect of routine intralesional corticosteroids has not been assessed systematically.
- This study suggests that intralesional corticosteroids may be useful for acute flare management.
- Routine intralesional treatment with triamcinolone reduces patient-reported pain significantly within 1 day, and physician-assessed severity within 7 days.

The aim of medical treatment is to reduce the incidence of inflamed nodules, and treatment usually requires weeks to months to be effective.[7-13] Studies of patient treatment have indicated that these flares are often treated with surgical procedures appropriate for treatment of abscesses such as incision and drainage. Although this method is suitable for the management of a cystic lesion such as an abscess, it is not appropriate for the management of a solid process such as the HS nodule. Incision and attempted drainage of nodules is therefore usually ineffective in relieving pain, and appears associated with a recurrence rate of 100% and increased scarring.[14] Therefore, incision and drainage is generally discouraged unless fluctuant abscesses have developed.[15] An unmet need for adequate management of acute flares therefore exists.

Intralesional injection of corticosteroid has been suggested[16] to fill this therapeutic gap, and has become a mainstay in the management of flares. Its mention in guidelines is, however, based on expert consensus and, to our knowledge, no actual assessment of its efficacy has been provided. The proposed mechanism of action is through activation of the glucocorticoid receptor, blocking synthesis of leukotrienes and reducing the production of proinflammatory cytokines such as interleukin-1. In addition, triamcinolone is also thought to inhibit cytotoxic T-cell activation.[17]

METHODS

This was a prospective multicenter study of intralesional injections (triamcinolone 10 mg/mL) into inflamed lesions associated with HS flares. Patients treated routinely with intralesional injections were included from the Department of Dermatology, Roskilde Hospital, Roskilde, Denmark (n = 10); Department of Dermatology, Erasmus University Medical Center, Rotterdam, The Netherlands (n = 19); Section of Dermatology and Venereology, Department of Medicine, Huddinge at Karolinska Institute, Stockholm, Sweden (n = 3); and Department of Dermatology, Stockholm South General Hospital, Stockholm, Sweden (n = 4). Adult, nonpregnant consecutive patients presenting with acute HS-related nodules or abscesses were included. The nodules or abscesses were injected with triamcinolone (10 mg/mL). The volume injected was dependent on the size of the lesion and decided solely by the treating clinician. Patients who returned for follow-up a week later were included.

In addition, the involved clinicians were asked to evaluate 3 signs of inflammation: redness, edema, and suppuration. Each aspect was evaluated on a 5-point (0-4) anchored rating scale: 0 represented normal-appearing skin in all aspects and 4 represented dark-red erythema, pronounced edema,

Table I. Median, mode, and physician-assessed parameters at day 0 (preinjection) and at follow-up

Physician-assessed parameters	Day 0	Follow-up
Redness (mode)	2 (2)	1 (1)*
Suppuration (mode)	2 (2)	1 (1)*
Size (mode)	3 (3)	1 (1)*
Edema (mode)	2 (2)	1 (1)*

*P = .001.

Table II. Volume of triamcinolone as predictor for visual analog scale scores difference, adjusted for size of the lesion

VAS score change	Beta	*P* value
Day 0-7	1.159	.099
Day 0-1	3.345	.447
Day 1-2	−2.693	.202

VAS, Visual analog scale.