Intermittent low-dose corticosteroid therapy for hidradenitis suppurativa: A case series

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Key words: betamethasone; glucocorticoids; HS; Hurley stage; pulsed; recalcitrant hidradenitis suppurativa.

INTRODUCTION

Hidradenitis suppurativa (HS) is an inflammatory disorder that affects the pilosebaceous unit of intertriginous zones.[1,2] Therapeutic interventions depend on the severity of the disease; however, for patients presenting with Hurley stage III, systemic immunosuppressive treatments are often indicated.[1,2] Short-term use of systemic corticosteroids can provide help in managing acute exacerbation in recalcitrant cases; however, withdrawal flares and side effects usually prevent their long-term use.[3-6] Administering corticosteroids through intermittent pulse dosing has proven effective in avoiding usual side effects as well as in exerting long-term remission in other inflammatory conditions.[7,8] Recent management guidelines reference intermittent therapy as a potential rescue therapy for acute HS flares; however no data currently exist on intermittent dosing of corticosteroids for HS.[1]

Herein, we present 3 cases of recalcitrant HS treated with oral intermittent low-dose betamethasone therapy (Table I).

Abbreviation used:

HS: hidradenitis suppurativa

CASE 1

A 47-year-old obese, nonsmoking woman with no family history of HS presented with a 1.5-year history of recurring abscesses in inframammary and inguinal areas. At presentation, the patient had more than 20 active abscesses as well as interconnected sinus tracts in both affected areas corresponding to Hurley stage III. Over the course of 11 months, the patient had no or little response to topical hydrocortisone, clindamycin, azelaic acid, betamethasone + clioquinol, clobetasol propionate, botulinum toxin injections, systemic tetracycline, systemic spironolactone, and systemic adalimumab. As a rescue therapy, oral intermittent low-dose betamethasone (5 mg twice weekly; equivalent to 31 mg prednisone) was administered. Within 3 months, near-complete remission was achieved (no abscesses, 1 nodule, and extensive scarring). Over 15 months, 2 tapering attempts were made; however, HS activity rapidly returned after both attempts. To keep the patient in remission, the administration of low-dose betamethasone was continued at 5 mg twice weekly. Adjuvant therapy included spironolactone at 100 mg and zinc at 45 mg daily, which kept the patient in near-complete remission. At present, the patient refuses to pursue other treatment options and is currently treated in collaboration with her primary physician and endocrinologist to prevent the development of glucose intolerance and osteoporosis. At present, no patient-reported side effects have been noted.

CASE 2

A 43-year-old nonobese, nonsmoking man with no family history of HS had recurring folliculitis in the face, back, and chest for several years. Three years prior to the presentation, deep folliculitis and abscesses started to develop in the axilla and gradually worsened with time. At presentation to the clinic,

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Funding sources: None.
IRB approval status: Not applicable.

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JAAD Case Reports 2021;13:105-8.
2352-5126

https://doi.org/10.1016/j.jdcr.2021.05.023

Table I. Summary of patients receiving intermittent betamethasone therapy for recalcitrant hidradenitis suppurativa

Case	Age	Sex	Obesity	Smoking	Disease duration	Location	Hurley stage	Previous treatment	Intermittent betamethasone dose	Treatment interval	Adjuvant therapy	Treatment duration	Response
1	47	Female	Yes	No	5 years	Inframammary and inguinal areas.	Stage III	Topical hydrocortisone, clindamycin, azelaic acid, betametason + clioquinol, clobetasol propionate, and botulinum toxin injection. Systemic tetracycline, spironolactone, and adalimumab.	Initial: 5 mg Current: 5 mg	Twice weekly	Systemic spironolactone 100 mg daily and zinc 45 mg daily.	15 months (ongoing)	Near-complete remission
2	43	Male	No	No	5 years	Axilla, chest, and back.	Stage III	Topical betametason + clioquinol, clindamycin, azelaic acid, and potassium permanganate. Systemic tetracyclin.	Initial: 5 mg Current: 2 mg	Twice weekly	Systemic zinc 45 mg daily.	17 months (ongoing)	Near-complete remission
3	22	Male	No	Yes	>5 years	Face, occiput, postauricular area, lateral hips, and intergluteal cleft.	Stage III	Systemic tetracycline, adalimumab, and acitretin.	Initial: 5 mg Current: Treatment discontinued	Twice weekly	Systemic acitretin 20 mg daily.	14 months (discontinued)	Near-complete remission

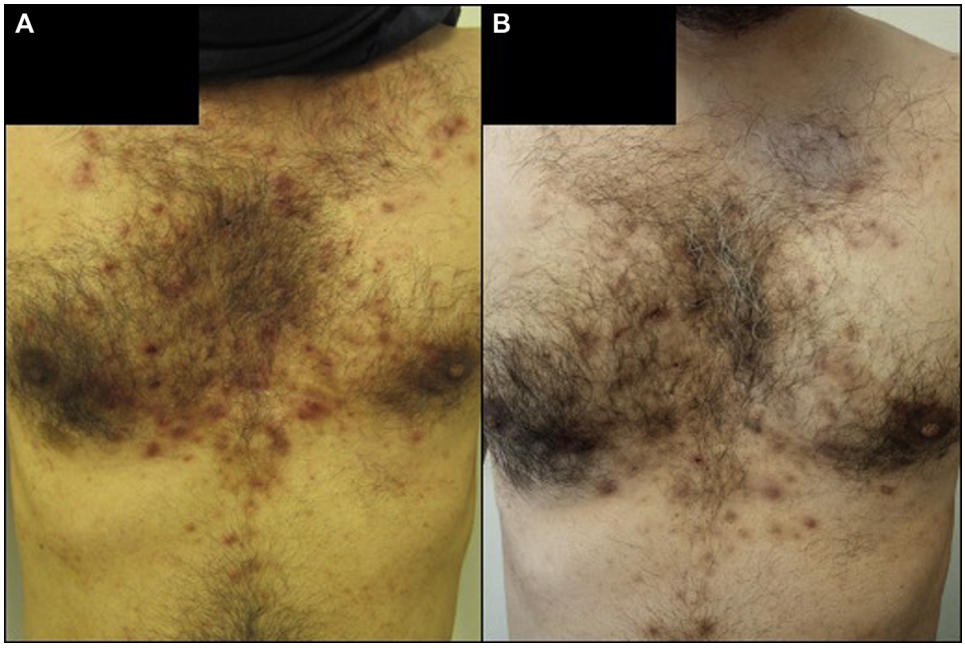

Fig 1. The 43-year-old nonobese, nonsmoking man in case 2. **A**, At presentation, multiple inflamed nodules and abscesses were present on the chest. After failed treatment attempts with topical clindamycin, azelaic acid, potassium permanganate, and betamethasone + clioquinol together with systemic tetracycline treatment with oral, low-dose, intermittent betamethasone (5 mg twice weekly; equivalent to 31 mg prednisone) was initiated. **B**, At a 3-month follow-up, the patient reported a 90% improvement; clinically, postinflammatory hyperpigmentation and scarring were observed on the chest with minimal inflammatory activity.

multiple inflamed nodules and abscesses were present in both axillae, back, and on the chest (Fig 1). Treatments that were attempted with topical clindamycin, azelaic acid, potassium permanganate, and betamethasone + clioquinol together with systemic tetracycline had little or no effect. The patient was started on oral, low-dose, intermittent betamethasone treatment (5 mg twice weekly), and after 3 months of treatment, the patient reported a 90% improvement. Clinically, a single eroded nodule was observed in the axilla; postinflammatory hyperpigmentation as well as extensive scarring was observed on the back and chest with little inflammatory activity. With gradual tapering of the dose over 17 months, currently, the patient is in near-complete remission on 2 mg betamethasone (equivalent to 12 mg prednisone) twice weekly coadministered with zinc 45 mg daily (Fig 1). No patient-reported side effects have been noted.

CASE 3

A 22-year-old nonobese man, who is a smoker, with no family history of HS had been treated for several years for folliculitis and abscesses in the face, postauricular area, and intergluteal cleft. At presentation to the clinic, extensive scarring in the face, postauricular area, and the occiput was noted. At the lateral hips and intergluteal cleft, multiple double-ended pseudocomedones and abscesses were present, corresponding to Hurley stage III. The patient had previously only been treated with tetracycline with limited effect. The patient was initially started on adalimumab and acitretin treatment (30 mg daily) with a good response; 9 months into the treatment, occasional inflammatory nodules started forming, especially in the face. Because of increasing episodes of headache, acitretin dose was lowered to 20 mg daily, and adalimumab treatment was discontinued. The patient quickly noted renewed activity primarily in the face and neck, and oral, intermittent, low-dose betamethasone therapy was added (5 mg twice weekly) alongside acitretin. Over the following 14 months, the dose was gradually lowered; at a dose of 1.5 mg (equivalent to 9 mg prednisone) twice weekly, the patient stayed in complete remission at clinical visits but reported occasional inflammatory nodules in the occiput area between visits. At present, betamethasone treatment has been discontinued, and the patient is in near-complete remission on acitretin 20 mg daily and topical sulfur and azelaic acid.

DISCUSSION

Experts, in recent years, have referenced the use of intermittent corticosteroid dosing in the management

of HS with little data to support it. Herein, we present 3 cases of severe HS (Hurley stage III) that responded well to oral, intermittent, low-dose betamethasone therapy. All patients were started on 5 mg twice weekly with gradual tapering of the dose. The patients were treated for 14 to 17 months; although 2 of the 3 patients are still receiving treatments, 1 patient is completely off betamethasone therapy. No severe side effects have been reported in any of the patients; however, because of recurrent withdrawal flares in 1 patient, prophylactic treatments for glucose intolerance and osteoporosis were initiated. Adjuvant HS therapy, such as zinc, spironolactone, or acitretin, was used in all patients.

The report is limited by its descriptive nature, the small number of patients, and the short follow-up time, yet it provides support in using intermittent, low-dose betamethasone for the treatment of recalcitrant HS. Although the regimen appears effective and severe side effects are minimized with pulsed dosing, the risk of withdrawal flares remains an important drawback to corticosteroid therapy. Going forward, optimal doses and intervals, as well as long-term gains and consequences of intermittent corticosteroid treatments remain to be investigated.

Conflicts of interest

None disclosed.

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