

# Consult Request

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## SPECIALTY

## Dermatology

## CHIEF COMPLAINT

**Hidradenitis suppurativa**

## COMMENTS TO SPECIALIST

Male presents with an 8-year history of hidradenitis suppurativa (HS). He does not have a primary care provider or dermatologist. The patient has made multiple visits to the emergency department (ED) for incisions and drainage but has never been hospitalized. He does not take any routine medications. Cocaine/marijuana use, Ethyl alcohol (EtOH) abuse 12 pack+ 1/5 daily prior to admission to this facility. He does not smoke cigarettes. He reports having over 25 incisions and drainages in the ED related to his HS.

HS affects the bilateral axilla, groin, and lower back. Three days ago, he started on Bactrim for an acute abscess in the right axilla.

**Exam:** The patient demonstrated a full range of motion in all extremities with no distress. His vital signs were within normal limits, and he denied any complaint other than the HS.

**\*\*DERM:** There is a 1 cm nodule "at 2 o'clock" with a small amount of purulent/sanguineous drainage upon manual expression with a 2 cm circumferential area of light erythema and warmth. There are varying degrees of induration/cyst-like features, mostly around the superior lesion with multiple areas of ropelike scars and pitted skin in the R axilla. Flat lesion at 8 o'clock with a peri-wound area that is soft, draining a scant amount of purulent fluid.

## MAIN QUESTION

Currently on Bactrim for acute infection. He needs long-term treatment. Please recommend a plan of care. See the attached photos.



## Specialist Response

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### SUMMARY

**Treatment options are available at the primary care level.**

### DETAILS

Start with Doxy 100 bid x 90 d, topical Hibiclens and over-the-counter zinc 30 bid. If this treatment is not effective, try Humira is next.

Hidradenitis suppurativa, or acne inversa, is a chronic destructive inflammatory disorder of the terminal follicular epithelium in apocrine gland-bearing regions. It is thought that follicular occlusion leads to trapping of follicular contents, rupture, and inflammation of the dermis, with bacterial superinfection in some cases. Hidradenitis suppurativa is more common in women, adults between the third and fourth decades of life, individuals of African descent, and the socioeconomically disadvantaged.

The nodules of hidradenitis suppurativa are most often seen on the buttocks, breasts, groin and axillae. The onset of the disease usually occurs soon after puberty, and patients typically report recurring "boils." Symptoms may include local pain and tenderness during a flare-up and arthralgias. Shaving, depilation, deodorants, and mechanical irritation can worsen this condition, but skin irritation is usually not a major factor.

Obesity and cigarette smoking are associated with hidradenitis suppurativa. Hidradenitis suppurativa and metabolic syndrome are strongly associated. Regional ileitis (Crohn disease) is statistically associated with hidradenitis suppurativa, while ulcerative colitis is not. A familial form of the disease has been supported by studies, including a molecular genetic study of 4 generations in a large Chinese family, through which a novel hidradenitis suppurativa locus on chromosome 1p21.1-1q25.3 was identified.

Furthermore, many patients report a positive family history. Rare cases of hidradenitis suppurativa are associated with the reticulate pigmented anomaly of the flexures (Dowling-Degos disease) and heterozygous mutations of PSENEN (gamma-secretase protein presenilin precursor). Hidradenitis suppurative-like lesions have been reported to very frequently occur during therapy with a gamma-secretase inhibitor.

Hidradenitis suppurativa shares similar clinical features (severe inflammation, occlusion of the follicle, and scarring) with dissecting cellulitis of the scalp and acne conglobata. Collectively, these 3 conditions are referred to as the follicular occlusion triad, and more than 1 may occur in a given patient. Some consider the pilonidal sinus (pilonidal cyst) an additional member of this group.

Syndromes include PASH (pyoderma gangrenosum, acne, and hidradenitis suppurativa), PAPASH (pyogenic arthritis, pyoderma gangrenosum, acne, and hidradenitis suppurativa), and PsAPASH (psoriatic arthritis, pyoderma gangrenosum, acne, and hidradenitis suppurativa). With a prevalence of up to 1% in some population-based studies, hidradenitis suppurativa is a common disease.

**Long-term management:** In patients with mild disease, consider topical antibiotics such as clindamycin 1% lotion for early active lesions with regular use of cleanser (benzoyl peroxide, chlorhexidine) between flares to decrease bacterial colonization.

For patients with moderate disease, consider a longer course of oral antibiotics over several months, such as doxycycline (100 mg twice daily), minocycline, or tetracycline. An alternative antibiotic treatment option includes combination therapy with oral clindamycin and rifampin. The combination of moxifloxacin 400 mg once daily, metronidazole 500 mg 3 times daily, and rifampin 300 mg twice daily for 6 weeks has been found in a case series to confer an excellent response in mild to moderate disease, but relapses may occur.

Dapsone at daily doses of 25-150 mg was also found to be effective in a small series of patients. Additional considerations include hormonal therapies, including oral contraceptives, spironolactone, and finasteride (5 mg/day for 3 months) in the appropriate patient setting. For those with severe disease, systemic retinoids such as isotretinoin 1 mg/kg daily have been found to be beneficial in some patients, as has acitretin in doses up to 25 mg twice daily.

Biologic agents, including the anti-TNF drugs, may also be useful. Adalimumab, a TNF-alpha inhibitor administered via subcutaneous injection, has been approved by the US Food and Drug Administration (FDA) for the treatment of moderate to severe hidradenitis suppurativa in adults. A Cochrane review and updated summary found both adalimumab and infliximab to be effective treatments, with high-quality evidence of the benefit of weekly dosing (40 mg) of adalimumab and moderate-quality evidence of the benefit of infliximab (5 mg/kg at weeks 0, 2, and 6). Further studies are needed. Anakinra, ustekinumab, bermekimab, and apremilast have yielded positive results in early, small studies.

Surgical techniques for end-stage management include the excision of affected tissues and the exteriorization of sinus tracts. Skin tissue-sparing excision with electrosurgical peeling (STEEP) is a tissue-sparing technique in which sequential tangential cuts are performed to clear disease areas with the aim of leaving normal tissue intact. Unroofing/deroofting procedures may be performed for recurrent nodules and tunnels. Simple incision and drainage of large cysts may be performed with the recognition that the recurrence rate is extremely high.

Additionally, it should be considered that keloids are more likely to develop in patients with darker skin phototypes. Intrakeloidal corticosteroid injections can be used if this should occur, but efficacy is debatable and patient-specific. Negative pressure therapy for 1-4 weeks followed by delayed reconstruction may be helpful for large open wounds.