



**Figure 1** Erythematous-purpuric area with tense blisters



**Figure 2** Extensive necrotic areas

Management of *V. vulnificus* infection includes clinical stabilization, antibiotics, and surgical debridement.<sup>3</sup> Delay in antibiotic initiation is an independent indicator of mortality.<sup>4</sup> Third-generation cephalosporin with doxycycline or minocycline is the best choice.<sup>5</sup> Early surgical debridement of necrotic lesions is imperative and has been shown to reduce mortality rates.<sup>4</sup>

*V. vulnificus* infection is probably an underdiagnosed, potentially fatal disease. Any patient presenting with septic conditions associated with severe skin lesions should be questioned regarding the consumption of raw shellfish or recent exposure to seawater.<sup>3</sup>

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#### Remote management of hidradenitis suppurativa in a pandemic era of COVID-19

Dear Editor:

Individuals with serious underlying medical conditions and those who are immunocompromised are at greatest risk for contracting coronavirus disease 2019 (COVID-19).<sup>1</sup> This raises concern for patients with chronic inflammatory disorders, such as hidradenitis suppurativa (HS), who may seek virtual care to reduce COVID-19 exposure. HS is a chronic, inflammatory skin disorder with risk factors, comorbidities, and complications which, when combined, may reduce an individual's defense

Biologics adverse event rates (%)	Nasopharyngitis		Upper respiratory tract infections	
	Treatment	Placebo	Treatment	Placebo
	Adalimumab <sup>2</sup>	8.2	5.7	4.1
Anakinra <sup>3</sup>	11.6	N/A	14	17
Guselkumab <sup>4</sup>	-	-	14.3*	12.8*
Infliximab <sup>5</sup>	12**	8**	32	25
Secukinumab <sup>6</sup>	11.4-12.3	8.6	2.5-3.2	0.7
Ustekinumab <sup>7</sup>	7-11	8	4-5	5

**Figure 1** Adverse event rates of nasopharyngitis and upper respiratory tract infections in patients with inflammatory conditions on biologic therapies. Range of percentages reflects adverse event rates with increasing doses. Most biologics show no difference or a slight increase in rates of nasopharyngitis and upper respiratory tract infections compared to placebo. \*Upper respiratory infection rates, including nasopharyngitis, upper respiratory tract infections, pharyngitis, and viral upper respiratory tract infections. \*\*Pharyngitis rates. N/A, not available

against infection. However, HS alone does not appear to be a specific risk factor for COVID-19. Nevertheless, managing HS virtually poses challenges because of complex treatment regimens involving lifestyle modifications and medical and surgical therapies. Here, we explore teledermatology management strategies and treatment considerations.


**Optimizing teledermatology visits:** To avoid emergency department/hospital visits and COVID-19 exposure, teledermatology has replaced most in-person consultations, posing unique challenges for HS management. For example, patients may feel reluctant and uncomfortable with exposing intertriginous (especially genital) areas via videoconferencing. Thus, we recommend patients send photos of private areas instead prior to their virtual appointment. To mitigate risks of data breach, photos can be sent via secure email or patient portal, which can then be directly uploaded onto their electronic medical record accessible to authorized individuals only. Furthermore, physical access to computers can be limited by locking workstations. For less sensitive body sites amenable to examination via videoconference, patients should be instructed to remove dressings in advance to minimize pain from rushed removals, and the same privacy standards used for in-person visits should be maintained during videoconferencing (e.g., private consultation room). Since providers are unable to palpate fluctuant lesions that may require specific treatment, patients may be asked to apply pressure to lesions on camera. Finally, providers should consider providing management strategies and tips on when to arrange teledermatology to triage whether in-person visits are required. Overall, even with optimized teledermatology, patients with HS may still require in-person care (e.g., surgery), making HS different from other chronic inflammatory dermatoses (e.g., atopic dermatitis or psoriasis) that do not involve procedures and can be managed remotely.

**Minimizing HS flares:** Experts recommend educating patients on flare prevention strategies (diet alteration and trigger

avoidance), having short-term antibiotic prescriptions available, and having medications delivered to patients. At-home management for HS flares includes warm compresses, benzoyl peroxide wash, topical anesthetics, resorcinol or dapsone 5% gel, and over-the-counter analgesics. Currently, derroofing, local anesthetic procedures, and intralesional injections may be offered, however, many HS surgeries have been postponed.

**Treatment considerations for HS:** Some biologics are associated with a slight increased risk of nasopharyngitis and upper respiratory tract infections (Fig. 1),<sup>2-7</sup> however, Frew et al. (2020) re-analyzed the adalimumab trials and reported an incidence rate of serious infections of 2.14 per 100 patient years, which was not significantly different compared to placebo and comparable to other inflammatory conditions.<sup>8</sup> Overall, patients with well-controlled HS, without signs/symptoms or a diagnosis of COVID-19, can continue on biologics with strict adherence to protective measures (social distancing, hand hygiene, and avoiding sick contacts). Furthermore, emerging data suggest biologics may not be detrimental in the setting of COVID-19<sup>9</sup>; however, providers should use their best judgment based on the patient's risks. Renin-angiotensin-aldosterone system (RAAS) inhibitors can be continued in patients who are stable and at risk/evaluated for or diagnosed with COVID-19, despite preclinical findings suggesting RAAS inhibitors increase angiotensin-converting enzyme 2 (the receptor for severe acute respiratory syndrome coronavirus 2 [SARS-CoV-2]), as this may not translate to humans.<sup>10</sup> Moreover, abrupt withdrawal of RAAS inhibitors may cause clinical deterioration.<sup>10</sup>

In conclusion, patients with HS require special strategies in remote care. Providers should consider initiating virtual support groups for patients experiencing profound psychosocial suffering.<sup>11</sup> Furthermore, the decision to continue treatment should be determined on a case-by-case basis, taking into consideration patients' exposure risks for SARS-CoV-2, HS severity, risk of flaring, comorbidities, drug mechanism of action, and patients' response to retreatment. More data are needed to guide HS management in the context of COVID-19, and we encourage practitioners to contribute to the following registries: (i) global hidradenitis suppurativa COVID-19 Registry (<https://hscovid.ucsf.edu>) – identifies predictors of outcomes and informs HS management during COVID-19; and (ii) COVID-19 Dermatology Registry (<https://www.aad.org/member/practice/coronavirus/registry>) – identifies dermatologic manifestations of COVID-19.

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## SERPINB7 novel mutation in Chinese patients with Nagashima-type palmoplantar keratosis and cases associated with atopic dermatitis

Dear Editor,

Nagashima-type palmoplantar keratosis (NPPK; MIM# 615598) is an autosomal recessive palmoplantar keratosis (PPK) caused by mutations in *SERPINB7*.<sup>1</sup> NPPK is clinically characterized by well-demarcated erythema with mild hyperkeratosis over the palms and soles that extends to the dorsal surfaces of the hands and feet, inner wrists, ankles, and Achilles tendon area.<sup>1,2</sup>