

Treatments for Hidradenitis Suppurativa Comorbidities Help With Pain Management

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Hidradenitis suppurativa (HS) has an unpredictable disease course and poses substantial therapeutic challenges. It carries an increased risk for adverse cardiovascular outcomes and all-cause mortality. It also is associated with comorbidities including mood disorders, tobacco smoking, obesity, diabetes mellitus, sleep disorders, sexual dysfunction, and autoimmune diseases, which can complicate its management and considerably affect patients' quality of life (QOL).¹ Hidradenitis suppurativa also disproportionately affects minority groups and has far-reaching inequities; for example, the condition has a notable economic impact on patients, including higher unemployment and disability rates, lower-paying jobs, less paid time off, and other indirect costs.^{2,3} Race can impact how pain itself is treated. In one study (N=217), Black patients with extremity fractures presenting to an emergency department were significantly less likely to receive analgesia compared to White patients despite reporting similar pain (57% vs 74%, respectively; $P=.01$).⁴ In another study, Hispanic patients were 7-times less likely to be treated with opioids compared to non-Hispanic patients with long-bone fractures.⁵ Herein, we highlight pain management disparities in HS patients.

Treating HS Comorbidities Helps Improve Pain

Pain is reported by almost all HS patients and is the symptom most associated with QOL impairment.^{6,7} Pain in HS is multifactorial, with other symptoms and comorbidities affecting its severity. Treatment of acute flares often is painful and procedural, including intralesional steroid injections or incision and drainage.⁸ Algorithms for addressing pain through the

treatment of comorbidities also have been developed.⁶ Although there are few studies on the medications that treat related comorbidities in HS, there is evidence of their benefits in similar diseases; for example, treating depression in patients with irritable bowel disease (IBD) improved pain perception, cognitive function, and sexual dysfunction.⁹

Depression exacerbates pain, and higher levels of depression have been observed in severe HS.^{10,11} Additionally, more than 80% of individuals with HS report tobacco smoking.¹ Nicotine not only increases pain sensitivity and decreases pain tolerance but also worsens neuropathic, nociceptive, and psychosocial pain, as well as mood disorders and sleep disturbances.¹² Given the higher prevalence of depression and smoking in HS patients and the impact on pain, addressing these comorbidities is crucial. Additionally, poor sleep amplifies pain sensitivity and affects neurologic pain modulation.¹³ Chronic pain also is associated with obesity and sleep dysfunction.¹⁴

Treatments Targeting Pain and Comorbidities

Treatments that target comorbidities and other symptoms of HS also may improve pain. Bupropion is a well-studied antidepressant and first-line option to aid in smoking cessation. It provides acute and chronic pain relief associated with IBD and may perform similarly in patients with HS.¹⁵⁻¹⁸ Bupropion also demonstrated dose-dependent weight reduction in obese and overweight individuals.^{19,20} Additionally, varenicline is a first-line option to aid in smoking cessation and can be combined with bupropion to increase long-term efficacy.^{21,22}

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Other antidepressants may alleviate HS pain. The selective norepinephrine reuptake inhibitors duloxetine and venlafaxine are recommended for chronic pain in HS.⁶ Selective serotonin reuptake inhibitors such as citalopram, escitalopram, and paroxetine are inexpensive and widely available antidepressants. Citalopram is as efficacious as duloxetine for chronic pain with fewer side effects.²³ Paroxetine has been shown to improve pain and pruritus, QOL, and depression in patients with IBD.²⁴ Benefits such as improved weight and sexual dysfunction also have been reported.²⁵

Metformin is well studied in Black patients, and greater glycemic response supports its efficacy for diabetes as well as HS, which disproportionately affects individuals with skin of color.²⁶ Metformin also targets other comorbidities of HS, such as improving insulin resistance, polycystic ovary syndrome, acne vulgaris, weight loss, hyperlipidemia, cardiovascular risk, and neuropsychologic conditions.²⁷ Growing evidence supports the use of metformin as a new agent in chronic pain management, specifically for patients with HS.^{28,29}

Final Thoughts

Hidradenitis suppurativa is a complex medical condition seen disproportionately in minority groups. Understanding common comorbidities as well as the biases associated with pain management will allow providers to treat HS patients more effectively. Dermatologists who see many HS patients should become more familiar with treating these associated comorbidities to provide patient care that is more holistic and effective.

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