Pain Management of Refractory Hidradenitis Suppurativa: Case Report

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ABSTRACT

**Background:** Hidradenitis suppurativa (HS) is a chronic, relapsing, and painful inflammatory condition of the skin. Pain in HS is one of the most common symptoms and has a devastating effect on quality of life. Here, we present a unique case of a patient with HS and pain management guidelines used to treat her condition.

**Case Report:** This is a 42-year-old woman with a history of HS, hypertension, depression who presented with one month of pain in her groin crease, vulva, and rectum. She was recently discharged from the hospital for HS superinfection. She was treated with intravenous and oral antibiotics. She previously tried treatment with acetaminophen, lidocaine 2\% jelly, gabapentin 400 mg TID, oxycodone, dilaudid, adalimumab, infliximab, topical clindamycin, intralesional steroid injections, and doxycycline. The pain management specialist recommended continuing treatment with gabapentin 400 mg TID and titrate to 600 mg TID as tolerated, and to follow up with the dermatology team to restart infliximab.

**Discussion:** This case demonstrates a complicated, refractory HS condition that necessitates first-, second-, and third-line treatment modalities. Pain control in HS starts by having best control of the underlying disease. The United States and Canadian Hidradenitis Suppurativa Foundations clinical guidelines suggest acute pain management should include topical analgesics (ie, lidocaine), oral acetaminophen, and oral nonsteroidal anti-inflammatory drugs. Chronic pain management should focus on a multidisciplinary approach. Clinical guidelines recommend escalating oral analgesics for pain that doesn’t respond to first-line agents. Opiate use should follow the World Health Organization pain ladder of tramadol, codeine, hydrocodone, and morphine. Neuropathic pain can be treated with pregabalin or gabapentin, titrated as tolerated by patients. Chronic HS lesions can be treated with wide local scalpel, CO\textsubscript{2}, or electrosurgical excision, and recurrent nodules can be deroofed or excised.

**Conclusion:** HS is an extremely painful condition severely affecting quality of life. Adequate pain management is vital, and a stepwise approach is recommended.

INTRODUCTION

Hidradenitis suppurativa (HS) is a chronic, relapsing, and painful inflammatory condition of the skin. Pain in HS is one of the most common symptoms and has a devastating effect on quality of life, impacting mental health, lost work, and substance use disorders\textsuperscript{1}. Pain can be acute or chronic in
nature and has nociceptive and neuropathic components. Nociceptive pain occurs as a result of tissue injury while neuropathic pain occurs due to sensory nerve damage. Inflammation is the likely cause of nociceptive pain in HS\(^2\). Neuropathic pain is caused by peripheral neuroplastic changes and central sensitization\(^2\). Current treatments are directed toward managing HS lesions and associated pain\(^1,3,4\). Here, we present a unique case of a patient with HS and pain management guidelines used to treat her condition.

### CASE REPORT

This is a 42-year-old woman with a history of HS, hypertension, depression who presented with one month of pain in her groin crease, vulva, and rectum. She was recently discharged from the hospital for HS superinfection. Wound cultures grew Escherichia coli, proteus, and group B streptococcus. She was treated with intravenous and oral antibiotics, including vancomycin, cefepime, metronidazole, and transitioned to cephalexin. The patient endorsed pain in her groin crease, vulvar area, and rectum that worsens with movement, bowel movements, and menstruation. The pain feels like needles, burning, and tearing. Her exam was notable for extensive sinus tracts and painful fissuring of the buttock, groin, and genital areas. She previously tried pain treatment with acetaminophen, lidocaine 2% jelly, gabapentin 400 mg TID, oxycodone, and intravenous dilaudid. She reported improvement in pain severity after treatment with antibiotics during hospitalization, currently reporting a 6/10. However, the daily pain causes significant functional limitation resulting in diminished quality of life and impaired age-appropriate ADL's. She denied numbness/tingling, loss of bowel/bladder functions, new motor deficits, fevers, chills.

The patient has a long history of HS. She has previously been treated with adalimumab, infliximab, topical clindamycin, intralesional steroid injections, and doxycycline. She has a surgical history of right hemivulvectomy in October 2020, left hemivulvectomy in November 2022, and panniculectomy in June 2021.

The pain management specialist recommended continuing treatment with gabapentin 400 mg TID and titrate to 600 mg TID as tolerated. The pain specialist recommended follow up with the dermatology team to restart infliximab as the likely source of pain was nociceptive/inflammatory in nature. She was considered for trial of a superior hypogastric plexus block and/or a ganglion impar block if her pain remained refractory.

### DISCUSSION

Pain secondary to HS lesions is debilitating and severely impacts quality of life. In recent years, pain management for HS has been under investigation for best practices. This case demonstrates a complicated, refractory HS condition that necessitates first-, second-, and third-line treatment modalities.

Pain control in HS starts by having best control of the underlying disease. The United States and Canadian Hidradenitis Suppurativa Foundations clinical guidelines suggest acute pain management should include topical analgesics (ie, lidocaine), oral acetaminophen, and oral nonsteroidal anti-inflammatory drugs\(^1,3,5\). Patients have also found pain relief with use of warm/cold compresses, Epsom salt baths, and marijuana\(^6\). Incision and drainage of...
Abscesses is only recommended for new, acute abscesses to relieve pain, since recurrence rates approach 100%5. Other guidelines also suggest the use of intralesional triamcinolone for acute lesions1,7-9.

Chronic pain management should focus on a multidisciplinary approach, including pain control and wound care. Pain management physicians are crucial to providing specialized care and should be incorporated for the multidisciplinary care for HS patients, as was done in this case. Clinical guidelines recommend escalating oral analgesics for pain that doesn’t respond to first-line agents in the acute phase. Opiate use should follow the World Health Organization pain ladder of tramadol, codeine, hydrocodone, and morphine5. Caution with opioids should be exercised if the pain is chronic in nature. Neuropathic pain can be treated with pregabalin or gabapentin, titrated as tolerated by patients1,5. Chronic HS lesions can be treated with wide local scalpel, CO2, or electrosurgical excision, and recurrent nodules can be deroofed or excised5. For chronic refractory pain, a trial of a superior hypogastric plexus block and/or a ganglion impar block can be performed. Superior hypogastric plexus block has demonstrated as much as 50-70% long-lasting relief for patients10. Ganglion impar block has also shown lasting improvement for chronic perineal or coccygodynia pain11,12.

The patient in this case received pain treatment with lidocaine 2% jelly and gabapentin 400 mg TID. Oxycodone and dilaudid were briefly administered to control severe pain. She also received treatments with intralesional triamcinolone. Given that the patient was not on biologic treatment for HS at the time of appointment with the pain management specialist, it was recommended to restart biologic treatment as the primary treatment for her painful condition in addition to gabapentin titration.

In advanced stages of HS, wide excision can be performed to treat the lesions5. The patient in this case had bilateral hemivulvectomy procedures. With wide excision, recurrence rates can be about 24.4%5, which occurred in this patient.

**CONCLUSION**

HS is an extremely painful condition severely affecting quality of life. Adequate pain management is vital, and a stepwise approach is recommended. Non-opioid medical management, including acetaminophen, NSAIDs, topical analgesics, pregabalin, and gabapentin, are first line. Short term opioids can be used for chronic, debilitating pain. Other treatments include intralesional triamcinolone and incision and drainage. Chronic management of refractory cases includes wide excision, although recurrence rates are high.

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