

# HidraCare Academy



## Module 3.01: Reducing the pain of hidradenitis suppurativa wounds

### Summary:

This module focuses on the pain experienced by patients with hidradenitis suppurativa, looks at strategies to reduce it, and examines how best practice around wound management can significantly and quickly reduce pain while improving healing outcomes

Keywords: Acne inversa

Author Info: HidraCare Academy

# Module Overview

## Exudate management in patients with Hidradenitis Suppurativa

1. Introduction	Intro to Hidradenitis Suppurativa & Pain
2. Pain & HS	Patient Experience of Pain with HS Types of Pain/Why is HS so Painful?
3. Pain & Wound Management	The Role of Advanced Wound Management Exudate Management Dressing Change
4. Guidelines	Recently published Guidelines
5. Conclusions	Key take aways from this module
6. Review Questions	10 questions to review your learning
7. References	Sources and full references for further reading

# Introduction

## What is Hidradenitis Suppurativa?

- Chronic inflammatory skin disease of the hair follicle
- Affects **1%** of the adult population
- Often significantly **underdiagnosed**
- Diagnosis can take up to 10 years on average
- Debilitating condition affecting **emotional wellbeing, life quality** and can place substantial burden on patients, the NHS and broader society
- Analysis by the Office of Health Economics indicate that the annual cost of HS to the UK economy is in the region of **£3.8 billion**
- HS wounds and their **drainage, odour and body location** represent a particularly difficult challenge. At a prevalence of 1%, the estimated cost for wound care is c. £1.4 billion



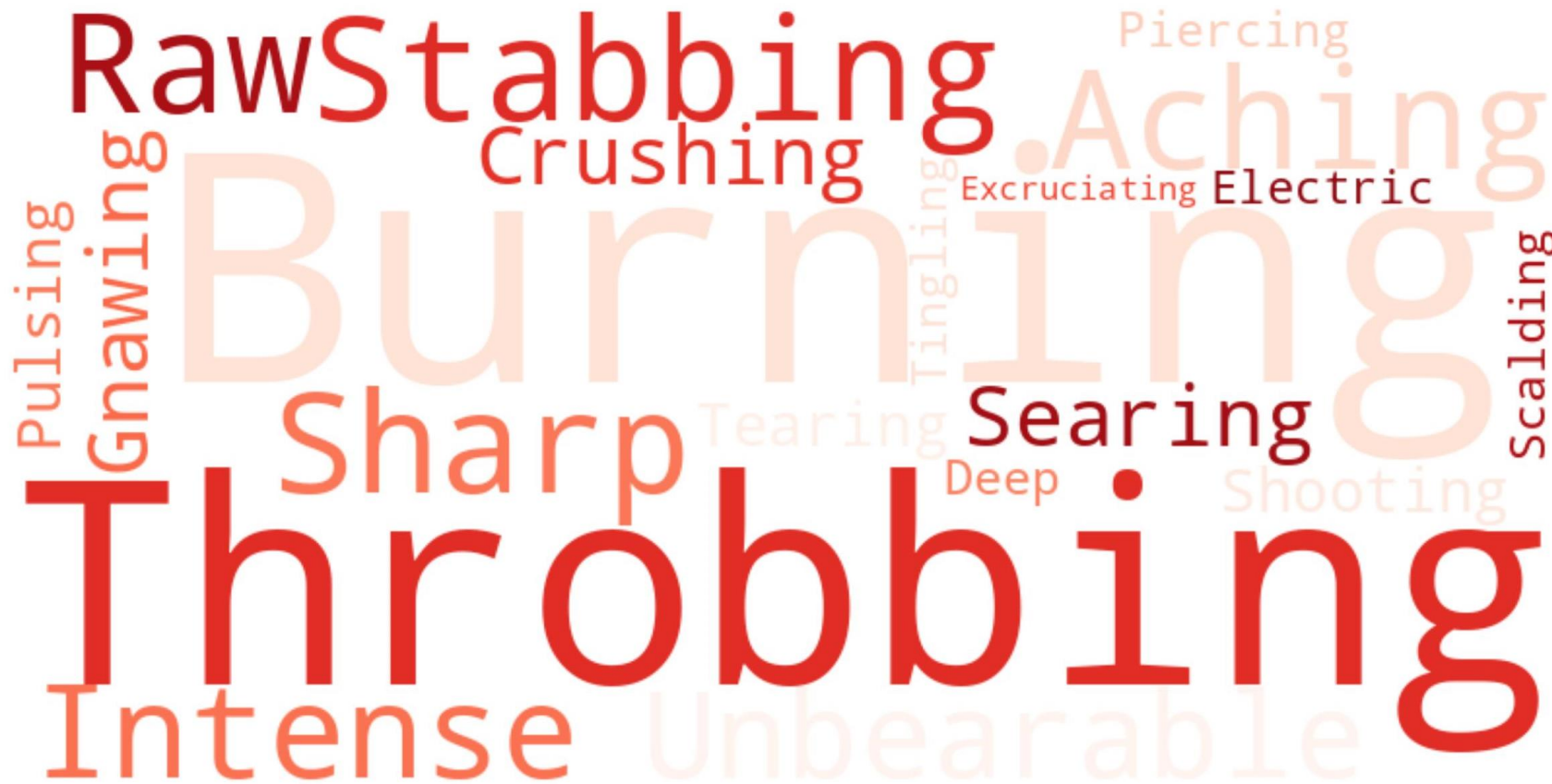
# What is Pain?

The International Association for the Study of Pain <sup>(1)</sup> defines as ‘an **unpleasant sensory and emotional experience** associated with actual or potential **tissue damage**’ and notes that;

- *Pain is always a personal experience that is influenced to varying degrees by biological, psychological and social factors*
- *Pain and nociception are different phenomena – pain cannot be inferred solely from activity in sensory neurons*
- *Through their life experiences, individuals learn the concept of pain*
- *A person's report of an experience as pain should be respected*
- *Although pain usually serves an adaptive role, it may have adverse effects in function and social and psychological well-being*
- *Verbal description is only one of several behaviours to express pain; inability to communicate does not negate the possibility of pain*



# Pain & Hidradenitis Suppurativa

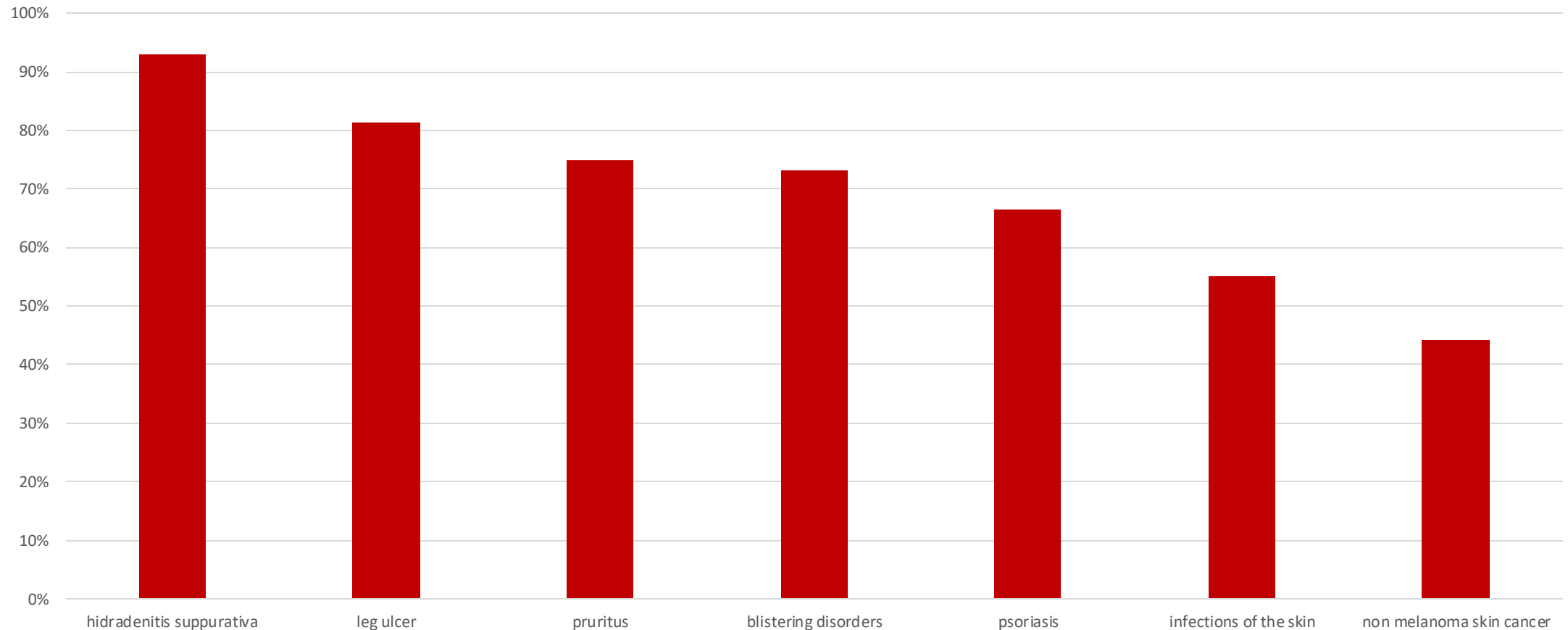


The pain of HS has been described as:

'sharp and searing, like being struck with a fireplace hot poker from the inside. It is the type of pain that makes you yelp with surprise. It can make walking, reaching or even sitting impossible. This makes it challenging to complete everyday tasks or even leave the house' (2)



# Pain is cited as the most difficult aspect of living with hidradenitis suppurativa (11)

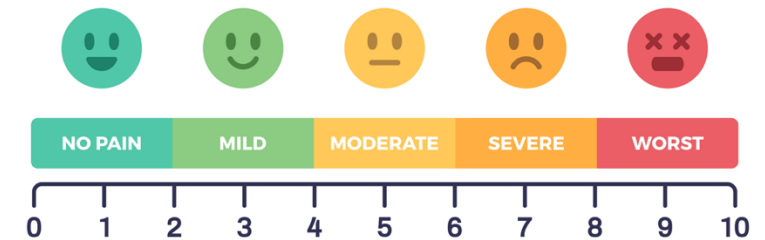


Prevalence of positive answers (“moderate” or “extreme”) to the question on the presence of pain/discomfort of the EuroQoL-5D (EQ-5D) questionnaire in different skin conditions. Data from 3,509 outpatients collected from November 2011 to February 2013. Red line indicates the prevalence of positive answers in controls (11)

# Pain & Hidradenitis Suppurativa

**Patients with HS consider pain to be;** <sup>(3-7)</sup>

- One of the worst symptoms
- The most important contributor to impairment of their quality of life
- One of the most intolerable features of the disease



A pain scale can be a useful tool to help understand a patients pain levels

**An international survey <sup>(7)</sup> of 1,299 HS patients found that;**

- 62% rated their pain as ‘moderate’ or ‘higher’
- 4.5% described it as the ‘worst possible’

A large case-control multi-centre study showed pain to be the highest in patients with HS, among several other dermatological conditions <sup>(8,9)</sup>

Patients with HS also reported worse pain and mental health compared to other chronic diseases such as hypertension, heart failure, diabetes, myocardial infarction and depression <sup>(10)</sup>. Pain in HS correlates more highly with Quality-of-Life impairment than even disease severity <sup>(4,11)</sup>

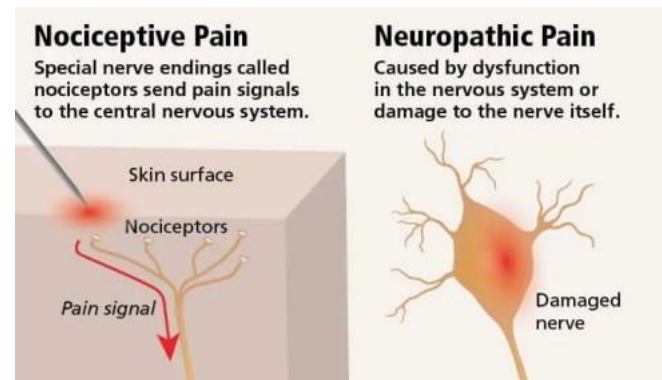
# Main types of pain involved in HS

Chronic (ongoing) and acute (sudden) pain is common with HS. There are two types of pain <sup>(13)</sup> associated with HS:

## Nociceptive Pain

Nociceptive pain serves as the body's alarm against physical harm. It is triggered when nociceptors, the specialized sensory neurons, detect damaging stimuli. This pain typically manifests as a sharp, aching, or throbbing sensation, directly responding to external injuries like cuts, bruises, or internal causes such as arthritis or inflammation.

Somatic nociceptive pain originates from the skin, bones, joints, muscles, or connective tissues. This makes the cause of pain easy to identify. A broken bone or sprained ankle is an example of somatic nociceptive pain. Visceral nociceptive pain stems from internal organs and the torso area, making it a bit harder to pinpoint. Kidney stones and appendicitis are examples of this type of pain.



*Graphic of nociceptive pain compared to neuropathic (14)*

## Neuropathic Pain

Neuropathic pain arises from damage or dysfunction in the nervous system, either in the central system (brain and spinal cord) or peripheral nerves. This type of pain often has a chronic nature and can result from various conditions.

Unlike nociceptive pain, neuropathic pain may not correlate directly with an observable injury or condition. It's often described as a burning, shooting, or 'pins and needles' sensation. The treatment for neuropathic pain can be more complex and may involve medications such as anticonvulsants, antidepressants, or specific pain relievers designed to target nerve pain.



# Why is HS so painful?

Hidradenitis suppurativa (HS) is an extremely painful condition due to a combination of factors, including inflammation, abscess formation, nerve involvement, and chronic wounds. Here's why it causes so much pain:

## **1. Deep, Inflamed Lesions**

- HS causes deep-seated nodules and abscesses filled with pus, which create pressure and severe tenderness.
- The inflammation spreads under the skin, affecting deeper tissues, making it feel like a stabbing or burning pain.

## **2. Recurrent Abscesses & Tunnels (Sinus Tracts)**

- The abscesses often rupture, leaking pus and blood, leading to a constant cycle of pain and infection.
- Over time, sinus tracts (tunnels) form under the skin, connecting abscesses and making flare-ups more intense.

## **3. Nerve Involvement**

- HS lesions develop in areas with many nerve endings (armpits, groin, buttocks, under breasts).
- The inflammation can press on nerves, causing sharp, shooting, and burning pain.

## **4. Chronic Wounds & Scarring**

- The open sores take a long time to heal, sometimes never fully closing.
- Thick scar tissue forms, leading to restricted movement and lingering discomfort.

## **5. Friction & Sweat Exacerbation**

- Since HS commonly occurs in skin folds, movement, sweating, and chafing worsen the pain.
- Everyday activities like walking, sitting, or lifting an arm can become excruciating.

## **6. Infections & Inflammation**

- Secondary infections can make the pain worse, leading to increased swelling, heat, and redness.
- The immune system stays in a constant state of overdrive, making flares unpredictable.

## **7. Emotional & Psychological Pain**

- The chronic nature of HS, along with its impact on mobility, hygiene, and self-esteem, can contribute to emotional distress.
- Many people with HS experience anxiety and depression, adding to their overall suffering.

# The Role of Advanced Wound Management

**Advanced Wound Management practice can play a key role in better managing the lesions and wounds caused by hidradenitis suppurativa, leading to better symptom management and improved healing**

- Traditionally, wet-to-dry gauze has been used to dress wounds. Dressings that create and maintain a moist environment, however, are now considered to provide the optimal conditions for wound healing <sup>(15)</sup>
- Moisture under occlusive dressings not only increases the rate of re-epithelialization but also promoted healing. Gauze does not exhibit these properties' it may be disruptive to the healing wound as it dries and causes tissue damage when removed <sup>(16)</sup>
- Extensive research has demonstrated that both the inflammatory and proliferative phases of dermal repair were shorter for wounds under moist conditions and that moist conditions deliver faster healing and a better-quality healing than the dry environment <sup>(17)</sup>
- A study into specific dressing types found that 'inflammatory cells easily bind to superabsorbent dressings and become locked in the highly absorbent code, thereby wicking harmful bacteria and inflammatory mediators away from a fragile wound base' <sup>(18)</sup>
- Such superabsorbent dressings can 'absorb high exudate levels without adhering to the fragile wound base and thus prevent wound bed damage and periwound maceration' <sup>(19)</sup>

# Pain & Exudate Management

## Relevant causes of HS Pain...

- HS causes deep-seated nodules and abscesses filled with pus, which create pressure and severe tenderness.
- The abscesses often rupture, leaking pus and blood, leading to a constant cycle of pain and infection.
- The open sores take a long time to heal, sometimes never fully closing.
- Since HS commonly occurs in skin folds, movement, sweating, and chafing worsen the pain.
- Secondary infections can make the pain worse, leading to increased swelling, heat, and redness.
- The chronic nature of HS, along with its impact on mobility, hygiene, and self-esteem, can contribute to emotional distress.
- Many people with HS experience anxiety and depression, adding to their overall suffering.

## Effective Exudate Management *(20)* can...

- Rapidly absorb drainage and lock it away from the body
- Reduce levels of inflammatory proteins (by removing those contained in the exudate)
- Provide an optimal moist wound healing environment for better healing (and reduce the risk of delays and complications)
- Can reduce friction and protect painful damaged tissues
- Lock away bacteria and reduce risk of infection in wounds
- Help patients feel more hygienic and improve body image and confidence
- Adhesive-free dressings can reduce the risk of pain and skin damage (including MARSI)

# Pain At Dressing Change

- Much of the research around wound pain has been focused on dressing changes. In a multinational study conducted by the European Wound Management Association (EWMA); clinicians rated dressing changes as the time of greatest pain to their patients <sup>(21)</sup>
- In other EWMA document, dried out dressings and aggressive adhesives were most likely to cause pain during dressing removal <sup>(22)</sup>
- It has been demonstrated that patients report more pain with gauze dressings than any other advanced wound care dressings <sup>(23)</sup>
- The MAPP Study evaluated 5,850 patients with acute and chronic wounds and found most (79.9%) reported 'moderate to severe' pain and that this was most often related to dressing selection <sup>(24)</sup>
- A published survey of 908 patients with HS from 28 countries found that 81% reported pain during their dressing changes <sup>(12)</sup>



Example of medical adhesive related skin injury caused by adhesive dressings

# Recently Published Guidelines

## British Dermatological Nursing Group <sup>(25)</sup>

- Choose soft, flexible dressings, ideally adhesive-free, retained with garments or bandages if appropriate
- Consider advanced dressings for wound bed if cavity or ulcerated lesions present
- Ask yourself – will adhesive dressings cause this patient more pain? If the answer is yes – try garment or bandage-based solutions

## Journal of American Academy of Dermatology <sup>(26)</sup>

- Woven gauze tends to stick to the wound bed and result in painful dressing change and should be avoided
- Dressings should be kept in place using atraumatic material and methods
- When removing a dressing, every effort should be made to achieve an atraumatic technique in order to avoid pain and discomfort

# Evidence for HS Specific Wound Dressing

'While evidence and learnings from other skin and wound conditions are helpful, informative and should be highly translatable, there are few, if any, studies of the use of dressings specifically on patients with HS'

An exception to this is a study <sup>(27)</sup> involving the use of a HS-specific lesion dressing system (HidraWear);

- The 21-day, single-arm, unblinded trial found statistically significant reductions in pain levels for all patients
- Patients that require pain relief in advance of dressing change at the baseline were able to cease pain medication by day 21
- The study also demonstrated significant improvements in Quality-of-Life, as well as great patient comfort, confidence and ease of product use compared to the standard of care

**Table 1. Average reduction in wound care impact criteria from day 0-21**

	Standard of care	HS-specific wound dressing system
Dressing-related pain	5.5	0.8
DLQI	19.4	4.6
DLQI–Dermatology Life Quality Index; HS–hidradenitis suppurativa		



# Summary

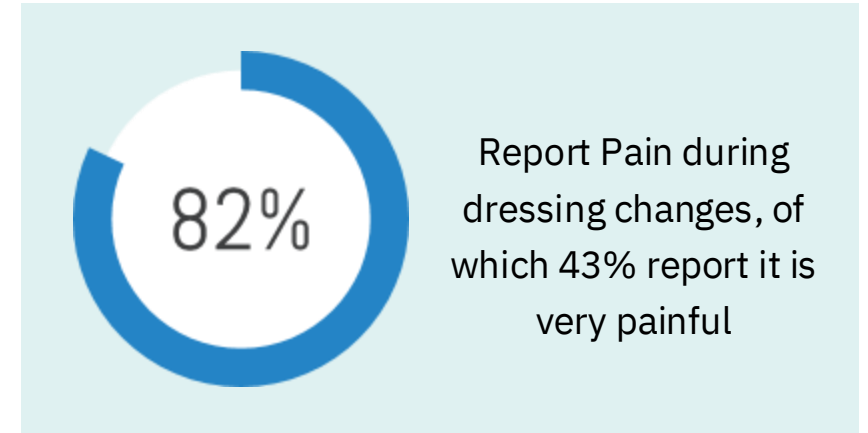
## For patients with HS;

- Pain is a major issue
- Considered one of the worst symptoms
- A major driver of impaired quality of life

## Pain can be significantly reduced through the;

- Use of modern moist wound healing dressings
- Avoidance of adhesive and adherent dressings
- Adoption of new HS-specific wound care solutions

*‘Extraordinarily debilitating. I can’t work; I can’t do school. I can’t function and ... every day moving on with my life turns into the worst thing ever’ - HS Patient (28)*



While it is critical to treat the underlying disease state, it should not be forgotten that relatively easy and simple changes in the day-to-day management of HS lesions and wounds can quickly and significantly improve patients' pain levels and quality-of-life

# Reflective Questions

1. How does the International Association for the Study of Pain define pain?
2. What words do HS patients typically use to talk about their pain experience?
3. Based on an international survey, what percentage of HS patients rate their pain as 'moderate to severe'?
4. What are the two main types of pain and how do they differ?
5. Explain why hidradenitis suppurativa is so painful?
6. How can advanced wound management practice help reduce the pain of HS?
7. Why can dressing change be a particularly painful occasion for HS patients?
8. What strategies can be utilised to reduce pain at dressing change?
9. In a recently published clinical study, an adhesive free wound dressing solution specifically designed for HS, was found to reduce pain from 5.5 to what value?
10. Describe 3 wound care related strategies that can be implemented to help reduce pain levels for patients with HS?

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