

# Hidradenitis suppurativa: diagnosis and treatment

Cheryl Handley

Hidradenitis suppurativa (HS) is a painful and distressing skin disease of the hair follicle affecting nearly as many people as psoriasis. Despite this, not many healthcare professionals know much about it, or can recognise it. This is probably the reason why there is such a considerable delay in people receiving a diagnosis and treatment. In recent years, there has been a significant effort to raise awareness of HS among both healthcare professionals and the general public so that timely access to treatment and support is provided, preventing progression of the disease, permanent damage, physical side-effects and a negative impact on patient wellbeing. This article gives an overview of HS and examines a wound dressing system developed and tested by people with the condition. Two case studies demonstrate potential benefits the system can offer to patients, clinicians and healthcare organisations.

## KEYWORDS:

- Hidradenitis suppurativa ■ Diagnosis ■ Treatment
- Wound dressing system

**H**idradenitis suppurativa (HS) is a devastating, progressive disease of the skin which is poorly understood and often misdiagnosed (British Dermatological Nursing Group [BDNG], 2022; Moloney et al, 2022). It affects the hair follicles and is characterised by recurring inflammatory nodules, abscesses, draining lesions and tunnels (World Union of Wound Healing Societies [WUWHS], 2016; Moloney et al, 2022).

The condition is sometimes referred to as apocrinitis, *acne inversa* and *pyoderma fistulans significa* (WUWHS, 2016). In recent years, various treatment guidelines have been developed (Moloney et al, 2022), but a delay in diagnosis and lack of effective wound management has led to enormous patient distress (Hendricks et al, 2021).

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**'... a delay in diagnosis and lack of effective wound management has led to enormous patient distress.'**

The reported prevalence of HS varies across geographical areas (Table 1) due to misclassification and selection bias (Young, 2018), however, it is thought to be around 1% in Europe (WUWHS, 2016).

Ingram et al (2018) state that many studies have not quantified undiagnosed cases and in an analysis of 4.3 million research-standard records, a HS prevalence of 0.77% is demonstrated.

## HOW DOES HS DEVELOP?

The pathophysiology of HS is not completely understood (Ingram, 2016). It is a skin disease of the hair follicles, specifically the hair shaft, the hair follicle, the sebaceous gland, and the erector pili muscle (also known as the follicular pilosebaceous unit)

(Zouboulis et al, 2015b; Young, 2018; Ferris and Harding, 2019).

The upper part of the hair follicle is occluded by a keratin plug which prevents drainage of the gland. This causes inflammation, dilation and rupture of the follicle with contents deposited into the surrounding dermal tissue. It can also cause subsequent sinus tract or abscess formation and destruction of the pilosebaceous unit (Zouboulis et al, 2015b; Ingram, 2020).

Typical HS lesions are mainly (Zouboulis et al, 2015a):

- ▶ Deep-seated, inflamed or non-inflamed nodules (Figure 1)
- ▶ Chronic painful abscesses
- ▶ Fistulas
- ▶ Cysts
- ▶ Draining sinus tracts
- ▶ Open tombstone comedones
- ▶ Scars (Figure 2).

## WHAT ARE THE RISK FACTORS?

While the exact cause for the condition is not known, numerous studies have discussed how the disease may be triggered by genetic and environmental factors. Many risk factors have been identified and researched over recent years. Risk factors and associated comorbidities for HS include:

- ▶ Family history of HS
- ▶ Obesity
- ▶ Smoking
- ▶ Female
- ▶ Type 2 diabetes
- ▶ Crohn's disease
- ▶ Hyperlipidaemia
- ▶ Down's syndrome
- ▶ Acne
- ▶ Depression
- ▶ Presence of other inflammatory conditions and syndromes, e.g. acne, arthritis, *pyoderma gangrenosum* — PASH (PG, acne and suppurative hidradenitis) PA-

**Box 1** Myth and fact

**Myth**

- ▶ *HS is a result of poor hygiene and/or is contagious.*

**Fact**

- ▶ *It is important to reassure patients that HS is not linked to poor hygiene and is not contagious.*

PASH (pyogenic arthritis, acne, PG and suppurative hidradenitis) (adapted from WUWHS, 2016; Ingram et al, 2018; Isoherranen et al, 2019; BDNG, 2022; Mahoney, 2023).

There are several myths surrounding HS which cause great distress to patients (Young, 2018; Smith and Lindsay, 2019). As a result, patients often experience high levels of shame (Keary et al, 2020).

**WHERE DOES HS OCCUR?**

HS most commonly involves axillary, inguinal, genitofemoral, gluteal, perineal and inflammatory areas.

Other less common anatomical sites include peristomal areas, areola of the breast, submammary fold, periumbilical skin, scalp, zygomatic and malar areas of the face, buttocks, thighs and popliteal fossa (Zouboulis et al, 2015a).

**WHAT DO I NEED TO LOOK OUT FOR?**

HS is a condition often overlooked, despite it affecting nearly as many people as psoriasis (BDNG, 2022). While there is no cure for HS, it is important that healthcare professionals are aware of the disease, so that they can provide timely access to treatment and support, and prevent permanent physical side-effects, as well as the negative impact on emotional and mental health which it can have (BDNG, 2022).

Therefore, the most important thing is recognising HS by being aware of the clinical presentation. There are two questions that can lead to an accurate and timely diagnosis:

- ▶ Have you had outbreaks of boils during the last six months?
- ▶ If yes, how many and which locations? (Vinding et al, 2014).

Two boils in one of the following five locations, axilla, groin, genitals, under the breasts or other less common locations (e.g. perianal, neck and abdomen), can be diagnosed as HS (Zouboulis et al, 2015a).

**DIAGNOSIS**

Diagnosis of HS is primarily clinical as there are no tests currently available (WUWHS, 2016). HS can be confused with other skin diseases, e.g. acne. As a result, diagnosis is often late (Anduquia-Garay et al, 2021).

Patients with HS need to be diagnosed as early as possible to control the disease and reduce the risk of the condition worsening, the skin architecture being damaged beyond repair and HS becoming established (Wolk et al, 2020; BDNG, 2022).

Consensus diagnostic criteria currently state that individuals must have typical lesions at typical sites and that the disease is chronic and recurrent, with at least two episodes in six months (Zouboulis et al, 2015a; Anduquia-Garay et al, 2021).

A positive family history of HS and the presence of normal skin microbiota (microorganisms seen in a particular site) can be considered positive support for diagnosis (Zouboulis et al, 2015a; WUWHS, 2016).

A recent consensus document (BDNG, 2022) has suggested key recommendations to improve diagnostic rates, including:

- ▶ The development of a diagnostic framework
- ▶ A poster or infographic that shows diagnostic signs which could be placed in GP surgeries,

- pharmacies and accident and emergency departments
- ▶ Education for all healthcare professionals, but particularly GPs, pharmacists and accident and emergency department staff
- ▶ Self-assessment tool for patients and information added to NHS Choice’s ‘Boils’ and ‘Abscesses’ pages to ensure HS symptoms are not treated in isolation
- ▶ Improving public awareness, e.g. awareness campaign designed for schools and universities as the condition often starts in puberty.

**HS ASSESSMENT**

HS assessment should include severity of the disease, its impact on quality of life and wound assessment.

**Severity of the disease**

There are a number of assessment or staging tools available, but the most widely used is Hurley’s staging system, which has been used clinically since 1989 (Young, 2018). It is based on presentation of the lesions and the extent of the scarring (Cassarino, 2022).

The Hurley staging system comprises three stages (Figure 3):

- ▶ Stage 1 (mild): single isolated lesions, no sinus tracts/scars
- ▶ Stage 2 (moderate): single/multiple lesions with sinus tracts
- ▶ Stage 3 (severe): widespread diffuse areas with sinus tracts (WUWHS, 2016; Cassarino, 2022).

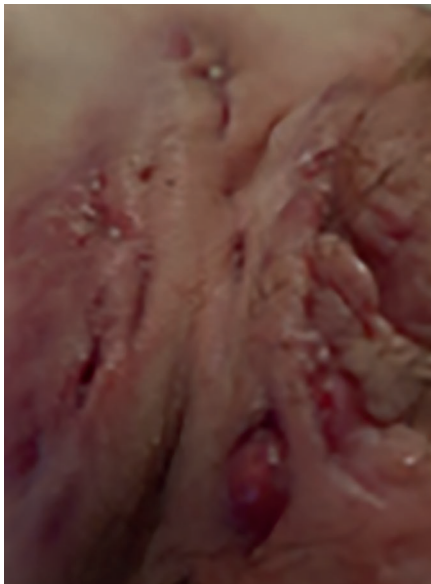
Most patients have stage 1 disease, stage 2 affects about one-third of patients, with about 4% of patients categorised as stage 3 (Vanlaerhoven et al, 2018).

**Impact on quality of life**

HS can have a profound physical and psychological impact on an individual. It is vital that the condition is seen as a debilitating

**Table 1: Reported prevalence of HS across geographical areas**

Prevalence	Geographical area
0.05%	USA from an analysis of patient insurance claims (Cosmatos et al, 2013)
0.67%	Australia (Calao et al, 2018)
1%	Europe (Zouboulis et al, 2015b)
4%	Denmark when young adult women were examined in person (Jemec, 1988)



**Figure 1.**  
Distorted skin. Reproduced courtesy of Suzanne Moloney.



**Figure 2.**  
Scars. Reproduced courtesy of Suzanne Moloney.

disease and its impact on daily life, self-esteem and social interaction should not be underestimated (WUWHS, 2016). Indeed, the impact of HS on patients is reported to be worse than that from other serious skin diseases, such as psoriasis (Storer et al, 2018).

A fundamental part of HS assessment is the impact the disease has on quality of life. The Dermatology Life Quality Index (DLQI) has been used in many studies to assess the burden of HS (WUWHS, 2016) and is recommended for use (Chernyshov et al, 2019. See *Practice point* box).

The impact of HS on quality of life can be described in five groups (WUWHS, 2016):

- ▶ Psychological factors can have a profoundly negative influence

on patients, family members and carers (Matusiak, 2020; Narla et al, 2020). Many psychological issues relate to the physical symptoms (e.g. pain, exudate leakage and itching) (WUWHS, 2016; Smith and Lindsay, 2019)

- ▶ Economic impact: this is related to being disabled or unable to work, reduced ability to work or perform responsibilities, unable to find work and frequent absences from work due to hospitalisation and mental health issues, sometimes resulting in unemployment (Garg et al, 2020; Matusiak, 2020)
- ▶ Pain: this is one of the most significant problems in patients with HS. In one study, pain was estimated to affect up to 97% (Krajewski et al, 2021)
- ▶ Living in dressings and bandages: wounds are often located in awkward areas to apply dressings such as the groin and axilla (Moloney et al, 2021)
- ▶ Social impact: HS can cause stigmatisation, social rejection and social isolation. HS most commonly affects young people during puberty exacerbating difficulties this group may already be having related to personal relationships, socialisation and their social networks (WUWHS, 2016).

In a recently published pilot study, Moloney et al (2022) examined the impact of an HS specific wound dressing system (HidraWear) on patient quality of life and dressing-related pain. The authors conducted a 21-day, single-arm, unblinded pilot trial to assess ease of use and the impact of the trial dressing system (primary objective) compared with the patient's previous product use. The secondary objectives were to evaluate if the trial dressing system was comfortable, improved quality of life, was faster to use than current product, reduced

dressing-related pain and provided secure dressing retention. A seven-item questionnaire and DLQI questionnaire were completed on days 0, 7, 14 and 21.

All 15 participants were female, aged 18 or older, and had a diagnosis of HS. In 100% of patients, the mean DLQI score was reduced significantly following use of the trial dressing system. Dressing-related pain was also significantly reduced. Patients reported improvements in terms of comfort, body confidence and the dressing's ability to retain exudate. The authors concluded that improvements can be made to patients' day-to-day activities and quality of life when HS-specific wound care products are provided (Moloney et al, 2022).

## WOUND ASSESSMENT

Once HS severity has been identified, wound assessment should include assessment of:

- ▶ Pain — using for example visual analogue scale (VAS), an 11-point scale (0–10) for self-report of pain, the most commonly used unidimensional pain scale (Faculty of Pain Medicine and British Pain Society, 2019)
- ▶ Wound bed and edge, exudate, odour and periwound skin — using for example the principles of TIMES (tissue, infection/inflammation, moisture balance, edge, surrounding skin) (Ferris and Harding, 2019; Krajewski et al, 2021; Mahoney, 2023).

## TREATMENT OPTIONS

As with any long-term condition, treatment options should always have the patient at the centre of decision-making, ensuring that they are well informed about their condition and understand the treatment options available (Mahoney, 2023).



**Figure 3.**  
Hurley stage 1 (left), stage 2 (middle) and stage 3 (right).

## Practice point

### What is the Dermatology Life Quality Index?

The Dermatology Life Quality Index, or DLQI, is a simple, self-administered and validated questionnaire to assess patient's quality of life in adults suffering from a skin disease.

First published in 1994, the DLQI consists of ten questions concerning patients' perception of the impact of skin diseases on different aspects of their health-related quality of life over the last week (Finlay and Khan, 1994). A minimum score is 0 and maximum score is 30. A score higher than 10 indicates the patient's life is being severely affected by their skin condition.

It has been used in many different skin conditions in over 80 countries and is available in over 110 translations. The DLQI is the most frequently used patient reported outcome measure in randomised controlled trials in dermatology.

### Medical

A number of medical therapies have either been suggested or are considered first line (Ingram et al, 2019), but they are supported by few randomised controlled trials (WUWHS, 2016).

British Association of Dermatologists (BAD) guidelines for the management of HS (Ingram et al, 2019) recommend two main medical therapies for use in patient management pathways — clindamycin 1% solution twice daily for affected skin regions and oral tetracycline for 12 weeks. In Hurley stage 3 disease, BAD recommends immediate clindamycin and rifampicin therapy (Ingram et al, 2019).

BAD (Ingram et al, 2019) and National Institute for Health and Care Excellence (NICE) guidelines (NICE, 2016) recommend adalimumab (an antibody that inhibits tumour necrosis factor [TNF]) as an option for treating active

moderate-to-severe HS in adults whose disease has not responded to conventional systemic therapy.

### Surgical

Surgical interventions are relatively underrepresented in management pathways because high quality evidence is sparse (Gulliver et al, 2016; Ingram et al, 2019). As a result, optimal surgical treatment in HS is controversial (Scuderi et al, 2017).

Surgical treatments are based on severity of the disease and the anatomical site involved (WUWHS, 2016), and include incision and drainage, skin grafts and flaps, and lesion roof removal followed by wound healing by secondary intention (WUWHS, 2016; Ingram et al, 2019; Sabat et al, 2020).

### Laser

Carbon dioxide laser excision has been reported to have a significant impact on quality of life (Saunte and Lapins, 2016). It is suitable for patients with mild-to-severe disease and can be performed under local or general anaesthetic (WUWHS, 2016).

Another method is long-pulsed Nd:YAG (neodymium-doped yttrium aluminium garnet) laser excision, in which the follicular pilosebaceous unit cells are destroyed (used to target hair follicles for permanent hair removal) (Ingram et al, 2016; Anduquia-Garay et al, 2021).

### Photodynamic therapy

Photodynamic therapy (PDT) utilises a molecular energy exchange between visible light and photosensitive drugs resulting in the production of reactive oxygen species (ROS). It causes selective cell necrosis, breaks up biofilm and can modulate inflammation (WUWHS, 2016).

### PRODUCT FOCUS

HidraWear is a novel wound dressing system intended for home use by people with HS who require routine wound management (Moloney et al, 2022; Figure 4). HidraWear was developed and tested by people with HS. The dressings, with a backing which has a customised loop coating that allows the fastener to adhere through the perforations, are placed over the wound area and secured in place with external fastening tabs (hook and loop mechanism).

HidraWear retention garments are available in a women's base layer, female and male briefs and unisex T-shirt.

### CASE STUDY: PATIENT ONE

#### Primary care centre, Birmingham

Mr X is a 60-year-old male patient who attended a primary care centre for two non-healing wounds in the axilla and groin. The patient had been under the care of the nursing team for two years and the wounds were



Women's Crop Top



Men's Boxer Briefs



Unisex T-shirt



Women's Briefs

Figure 4.

*HidraWear, wearable wound care systems developed specifically for use with HS patients.*

## Practice point

### HS immediate care/first aid

- ▶ Alarm bells should start to ring if you are seeing someone with repeated boils and abscesses, particularly if they affect the axillae or the groin area (Penzer-Hick, 2022). Ask the two key questions that can lead to an accurate and timely diagnosis:
  - Have you had outbreaks of boils during the last six months?
  - If yes, how many and in which locations?
- ▶ If HS is suspected, refer to a GP or onwards to a dermatologist as soon as possible
- ▶ Manage pain using a pain ladder to guide choice (NICE, 2021)
- ▶ When choosing a wound dressing, preferably choose a dressing or system specifically designed for HS wounds, or a wound dressing/tape that has a gentle medical adhesive. Strong medical adhesives and makeshift dressings can cause extreme pain and adhesive sensitivity.

described as deteriorating, painful, highly exuding and malodorous. The surrounding skin was macerated, excoriated and bleeding.

Treatment comprised a silver Hydrofiber® primary dressing with a silicone adhesive bordered foam secondary dressing, which needed to be changed every day, taking nurses over 45 minutes. However, this daily dressing regimen failed to contain the exudate, resulting in leakage and the patient becoming housebound. His quality of life score using DLQI showed a score of 17.

Daily traditional wound dressing usage included:

- ▶ Two silicone adhesive bordered foam retention dressings and two silver Hydrofiber primary dressings
- ▶ Weekly cost of supplies: £118.16
- ▶ Weekly cost of nurse time at £75/unit: £375
- ▶ Total monthly cost at four weeks: £1,972.64.

Following assessment and wound management discussion with the patient, it was decided to change the treatment regimen. After showing the patient how to self-care using HydraWear, nursing time reduced to one visit per week for two weeks to check on the performance of the product. Subsequent visits were reduced to once every two weeks to check on wounds and to supply dressings to patient. Pain, exudate volume and malodour reduced while the surrounding skin condition improved (Figure 5). The patient's quality of life score using DLQI showed a clinically meaningful improvement, reducing from 17 to 0.

Daily HydraWear usage:

- ▶ Three HydraWear dressings, two HydraWear boxer briefs and two HydraWear T-shirts
- ▶ Weekly cost of supplies: £63.16
- ▶ Weekly cost of nurse time at £75/unit: £37.50
- ▶ Total monthly cost at four weeks: £397.

This case report demonstrates the benefits of HydraWear in community and primary care, both to patients and clinicians. The patient's quality of life improved and he now leads a normal life. Clinician time was reduced with a monthly saving of £1,575 to the NHS.

### CASE STUDY: PATIENT TWO

#### Dermatology department, Dudley

Mr Y is a male patient, who was

attending a dermatology clinic for two non-healing HS wounds in the axilla and groin. His treatment duration was described as 'constant', and he was receiving adjunct treatment for the condition of the wounds. The wounds were described as deteriorating, extremely painful, highly exuding and malodorous. The surrounding skin was inflamed and excoriated while he was being treated with traditional dressings. Mr Y self-manages his wound care.

Treatment composed of a film plus pad and silicone adhesive bordered foam primary dressing which needed to be changed every day, taking the patient 20 minutes.

Daily traditional wound dressing usage included:

- ▶ Two silicone adhesive bordered foam and two film plus pad primary dressings plus film tape and traditional adhesive tape
- ▶ Weekly cost of supplies: £71.40
- ▶ Monthly cost of supplies: £285.60.

Following assessment and wound management discussion in which the patient was involved, the treatment regimen changed to HydraWear. Subsequent dressing changes took 4–10 minutes for the patient. Pain, exudate volume and malodour reduced, while the condition of the surrounding skin improved (Figure 6). The patient stated that the garments provided were excellent — soft and comfortable to wear. The dressings were easier to apply and lasted longer

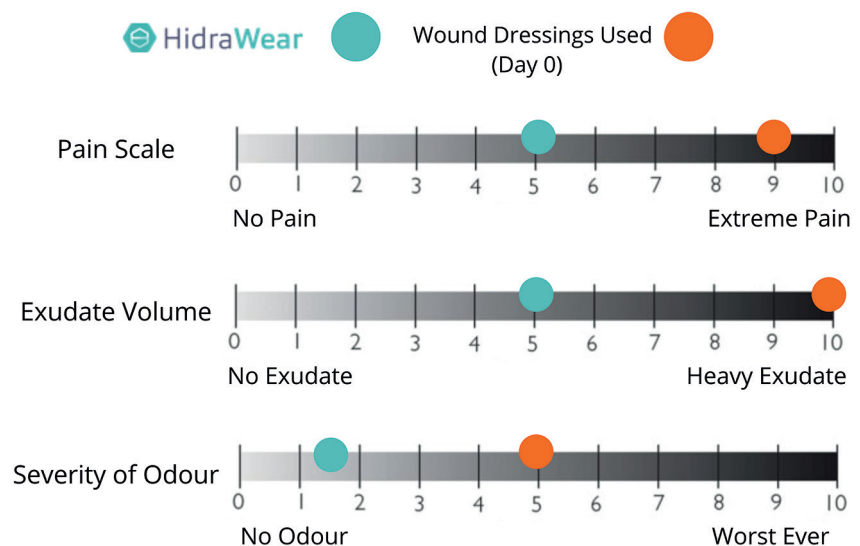


Figure 5. Patient one — wound characteristics assessment.

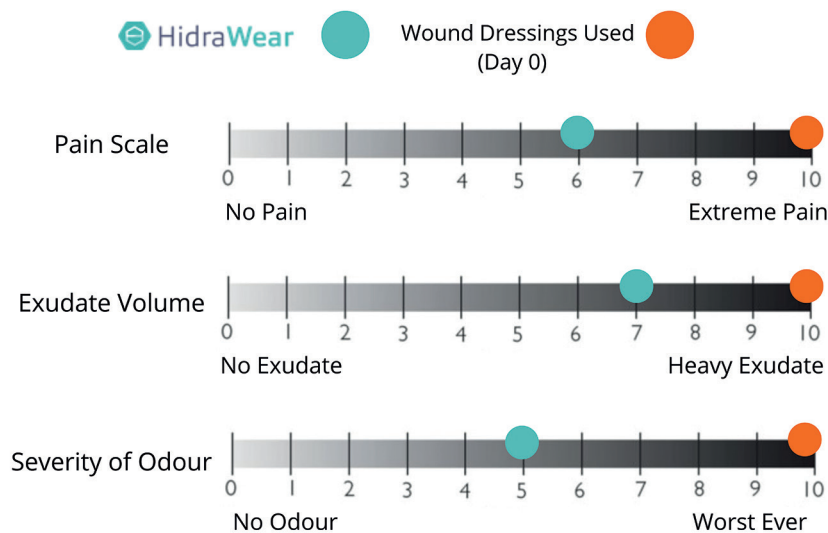


Figure 6. Patient two — wound characteristics assessment.

between dressing changes. Mr Y was happy to wash the garments and said he would recommend the treatment regimen to other patients with HS.

Daily HidraWear usage:

- ▶ Two HidraWear dressings, two HidraWear boxer briefs and two HidraWear T-shirts
- ▶ Weekly cost of supplies: £46.86
- ▶ Monthly cost of supplies: £187.40.

This case demonstrates the benefits of HidraWear in dermatology practice, both to the patient and the clinician. A monthly saving of £98.20 on the cost of supplies to the NHS was seen, as the HidraWear dressings lasted longer than previous products.

## CONCLUSION

HS is a chronic inflammatory skin disease with a profound physical and psychological impact on quality of life for individuals. The pathophysiology of HS is not completely understood, but it is primarily a skin disease of the hair follicles. The primary diagnostic criteria of HS is that individuals have typical lesions at typical sites and that the disease is chronic and recurrent.

There are many problems associated with traditional wound dressings for this patient cohort, but wearable wound care systems have been developed specifically for use for HS patients.

As more healthcare professionals and the general public become aware

of this devastating disease, speed of diagnosis, referral and treatment will hopefully dramatically improve. **JCN**

## REFERENCES

- Anduquia-Garay F, Rodríguez-Gutiérrez MM, Poveda-Castillo IT, et al (2021) Hidradenitis suppurativa: Basic considerations for its approach: A narrative review. *Ann Med Surg* 68: 102679
- British Dermatological Nursing Group (2022) *Optimising hidradenitis suppurativa care: a multi-professional consensus statement*. Available online: <https://bdng.org.uk/dermatological-nursing-supplements/>
- Calao M, Wilson JL, Spelman L, et al (2018) Hidradenitis Suppurativa (HS) prevalence, demographics and management pathways in Australia: A population-based cross-sectional study. *PLoS ONE* 13(7): e0200683
- Cassarino D (2022) *Hidradenitis suppurativa*. *BMJ Best Practice*. Available online: <https://bestpractice.bmj.com/topics/en-gb/1047>
- Chernyshov PV, Zouboulis CC, Tomas-Aragones L, et al (2019) Position statement. Quality of life measurement in hidradenitis suppurativa: position statement of the European Academy of Dermatology and Venereology task forces on quality of life and patient-oriented outcomes and acne, rosacea and hidradenitis suppurativa. *J Eur Acad Dermatol Venereol* 33: 1633–43
- Cosmatos I, Matcho A, Weinstein R, et al (2013) Analysis of patient claims data to determine the prevalence of hidradenitis suppurativa in the United States. *J Am Acad Dermatol* 68: 412–19
- Faculty of Pain Medicine and British Pain Society (2019) *Outcome measures*. Available online: [www.britishpainsociety.org/static/uploads/resources/files/Outcome\\_Measures\\_January\\_2019.pdf](http://www.britishpainsociety.org/static/uploads/resources/files/Outcome_Measures_January_2019.pdf)
- Ferris A, Harding K (2019) Hidradenitis suppurativa: a clinical summary. *Wounds UK* 15(1): 53–7
- Finlay AY, Khan GK (1994) Dermatology Life Quality Index (DLQI) — a simple practical measure for routine clinical use. *Clin Exp Dermatol* 19(3): 210–16
- Garg A, Neuren E, Cha D, et al (2020) Evaluating patients' unmet needs in hidradenitis suppurativa: Results from the Global Survey of Impact and Healthcare Needs (VOICE) Project. *J Am Acad Dermatol* 82(2): 367–76
- Gulliver W, Zouboulis CC, Prens E, Jemec G, Tzellos T (2016) Evidenced-based approach to the treatment of hidradenitis suppurativa/acne inversa, based on the European guidelines for hidradenitis suppurativa. *Rev Endocr Metab Disord* 17: 343–51
- Hendricks AJ, Hsiao JL, Lowes MA, Shi VY (2021) A comparison of international management guidelines for hidradenitis suppurativa. *Dermatol* 237: 81–96
- Ingram JR (2016) Hidradenitis suppurativa: an update. *Clin Med* 16(1): 70–3
- Ingram JR, Woo PN, Chua SL, et al (2016) Interventions for hidradenitis suppurativa: a Cochrane review incorporating GRADE assessment of evidence quality. *Br J Dermatol* 174: 970–8
- Ingram JR, Jenkins-Jones S, Knipe DW, et al (2018) Population-based Clinical Practice Research Datalink study using algorithm modelling to identify the true burden of hidradenitis suppurativa. *Br J Dermatol* 178(4): 917–24
- Ingram JR, Collier F, Brown D, et al (2019) British Association of Dermatologists guidelines for the management of hidradenitis suppurativa (acne inversa) 2018. *Br J Dermatol* 180(5): 1009–17
- Ingram JR (2020) The epidemiology of hidradenitis suppurativa. *Br J Dermatol* 183(6): 990–8
- Isoherranen K, O'Brian J, Barker J, et al (2019) *EWMA document: Atypical wounds. Best clinical practice and challenges*. EWMA. Available online: <https://ewma.org/what-we-do/projects/atypical-wounds/atypical-wounds-document>

## KEY POINTS

- Hidradenitis suppurativa (HS) is a painful and distressing skin disease of the hair follicle affecting nearly as many people as psoriasis.
- While there is no cure for HS, it is important that healthcare professionals are aware of the disease, so that they can provide timely access to treatment and support.
- HS assessment should include severity of the disease, its impact on quality of life and wound assessment.
- It is vital that the condition is seen as a debilitating disease and its impact on daily life, self-esteem and social interaction should not be underestimated.
- HidraWear is a novel wound dressing system intended for home use by people with HS who require routine wound management.

Jemec GBE (1988) The symptomatology of hidradenitis suppurativa in women. *Br J Dermatol* 119(3): 345–50

Keary E, Hevey D, Tobin AM (2020) A qualitative analysis of psychological distress in hidradenitis suppurativa. *Br J Dermatol* 182(2): 342–7

Krajewski PK, Matusiak L, von Stebut E, et al (2021) Pain in hidradenitis suppurativa: a cross-sectional study of 1,795 patients. *Acta Derm Venereol* 101: adv00364

Narla S, Lyons AB, Hamzavi IH (2020) The most recent advances in understanding and managing hidradenitis suppurativa. *F1000Res* 9(Faculty Rev): 1049

Mahoney K (2023) Assessing, treating and supporting patients with hidradenitis suppurativa. *J Gen Practice Nurs* 9(1): 29–34

Malcolm C, Javed MU, Dickson W (2015) Support groups for hidradenitis suppurativa. Available online: [www.thepmfajournal.com/features/features/post/support-groups-for-hidradenitis-suppurativa](http://www.thepmfajournal.com/features/features/post/support-groups-for-hidradenitis-suppurativa)

Matusiak L (2020) Profound consequences of hidradenitis suppurativa: a review. *Br J Dermatol* 183(6): 171–7

Moloney S, McGrath BM, Roshan D, Gethin G (2021) The personal impact of daily wound care for hidradenitis suppurativa. *Dermatol* 20: 1–10

Moloney S, Fitzgerald D, Roshan D, Gethin G (2022) Impact of hidradenitis suppurativa-specific wound dressings systems on patient quality of life and dressing-related pain: pilot study. *J Wound Care* 31(11): 898–906

National Institute for Health and Care Excellence (2016) *Adalimumab for treating moderate to severe hidradenitis suppurativa*. Technology appraisal guidance TA392. Available online: [www.nice.org.uk/guidance/ta392](http://www.nice.org.uk/guidance/ta392)

National Institute for Health and Care Excellence (2021) *Analgesia — mild-to-moderate pain. Scenario: choice of analgesic*. Clinical Knowledge Summaries. Available online: <https://cks.nice.org.uk/topics/analgesia-mild-to-moderate-pain/management/choice-of-analgesic/>

Penzer-Hick R (2022) Hidradenitis suppurativa: a common condition often left undiagnosed. *J Community Nurs* 36(4): 16–17

Sabat R, Jemec G, Matusiak L, et al (2020) Hidradenitis suppurativa. *Nat Rev Dis Primers* 6(1): 18

Saunte DM, Lapins J (2016) Lasers and intense pulsed light hidradenitis suppurativa. *Dermatol Clin* 34: 111–19

Scuderi N, Monfrecola A, Dessy LA, et al (2017) Medical and surgical treatment of hidradenitis suppurativa: a review. *Skin Appendage Disord* 3: 95–110

Smith R, Lindsay C (2019) Patient story: living with hidradenitis suppurativa and pilonidal disease. *Wounds UK* 15(5): 54–8

Storer MA, Danesh MJ, Sandhu ME, Pascoe V (2018) An assessment of the relative impact of hidradenitis suppurativa, psoriasis and obesity on quality of life. *Int J Womens Dermatol* 4(4): 198–202

Vanlaerhoven AMJD, Ardon CB, van Straalen KR, et al (2018) Hurley III hidradenitis suppurativa has an aggressive disease course. *Dermatology* 234(5): 232–33

Vinding GR, Miller IM, Zarchi K, et al (2014) The prevalence of inverse recurrent suppuration: a population-based study of possible hidradenitis suppurativa. *Br J Dermatol* 170(4): 884–9

Wolk K, Join-Lambert O, Sabat R (2020) Aetiology and pathogenesis of hidradenitis suppurativa. *Br J Dermatol* 183: 999–1010

World Union of Wound Healing Societies (2016) *Position document. Understanding hidradenitis suppurativa*. Wounds International, London

Young T (2018) Back to basics: understanding hidradenitis suppurativa. *Wounds UK* 14(1): 71–6

Zouboulis CC, del Marmol V, Mrowietz U, et al (2015a) Hidradenitis suppurativa/acne inversa: criteria for diagnosis, severity assessment, classification and disease evaluation. *Dermatol* 231: 184–90

Zouboulis CC, Desai N, Emtestam L, et al (2015b) European S1 guideline for the treatment of hidradenitis suppurativa/acne inversa. *J Eur Acad Dermatol Venereol* 29(4): 619–44

## Resources

HS support groups (Malcolm et al, 2015):

- ▶ British Skin Foundation <https://www.britishskinfoundation.org.uk/>
- ▶ European Hidradenitis Suppurativa Foundation <https://ehsf.eu/>
- ▶ Hidradenitis Suppurativa online [https://www.hsonline.ae/en\\_ae/home.html](https://www.hsonline.ae/en_ae/home.html)
- ▶ Patient UK <https://www.patient.co.uk>
- ▶ British Association of Dermatologists <http://www.bad.org.uk>
- ▶ NHS Choices <https://www.nhs.uk/conditions/hidradenitis-suppurativa/>

JCN eLearning module: [www.jcn.co.uk/course/understanding-hidradenitis-suppurativa/details](http://www.jcn.co.uk/course/understanding-hidradenitis-suppurativa/details)  
Facebook Live, 17th May: [www.woundcare-today.com/facebook-live/facebook-live-treating-wounds-in-challenging-areas-hidradenitis-suppurativa](http://www.woundcare-today.com/facebook-live/facebook-live-treating-wounds-in-challenging-areas-hidradenitis-suppurativa)

HS Awareness week: the first full week of June every year — raising awareness of HS and highlighting the challenges that people living with HS face