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REVIEW

Management of Hidradenitis Suppurativa in the United Arab Emirates (UAE): A Consensus Statement from the Emirates Dermatology Society

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ABSTRACT

***Introduction*:** Hidradenitis suppurativa (HS) is a chronic inflammatory skin disease affecting the pilosebaceous unit and is linked to several comorbid disorders as well as an economic impact burden. Variations in clinical presentation, comorbidities and healthcare delivery across regions necessitate localised guidelines. This consensus aims to provide evidence-based, expert-driven recommendations tailored to the United Arab Emirates (UAE) healthcare context to standardise and improve HS management.

***Methods*:** A three-phase modified Delphi methodology was employed to develop consensus statements among 14 experts based in the UAE. A comprehensive literature review informed the development of 61 draft statements covering diagnosis, classification, comorbidities, treatment and multidisciplinary care. Statements

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achieving ≥ 80% agreement in two rounds of voting were included. Final recommendations reflect expert consensus and current best evidence.

Results: A total of 58 consensus statements were adopted. Key recommendations address clinical diagnosis on the basis of lesion type and anatomical location, the use of Hurley staging and International Hidradenitis Suppurativa Severity Score System (IHS4) for severity assessment, and the need for screening for metabolic and inflammatory comorbidities. Treatment guidance includes lifestyle modifications, the use of topical and systemic antibiotics, hormonal therapy, biologics and surgical options, based on disease severity. Supportive care, including pain management, psychological support and multidisciplinary coordination, was emphasized. A management algorithm was developed for practical application.

Conclusions: This consensus provides the first UAE-specific guidelines for HS diagnosis and management. It supports a comprehensive, stepwise and multidisciplinary approach to reduce disease burden and improve patient outcomes. Adoption of these recommendations is expected to harmonise clinical practice and foster improved quality of care for patients with HS in the UAE.

PLAIN LANGUAGE SUMMARY

Hidradenitis suppurativa (HS) is a painful, long-term skin condition that causes lumps, abscesses and scarring, mostly in areas such as the armpits, groin and buttocks. It can significantly affect a person's quality of life and is often associated with other health problems, such as diabetes, obesity and depression. This document presents the first expert-agreed treatment recommendations specifically developed for patients in the United Arab Emirates (UAE). A group of 14 dermatologists from across the country reviewed the latest research and shared their clinical experience to develop 58 clear statements to guide doctors in diagnosing and treating HS. These recommendations include advice on how to recognise and assess HS, when to use medications or surgery, and the importance of supporting patients emotionally and socially. The experts also created step-by-step management plans tailored to different stages of the disease. By following these UAE-specific recommendations, healthcare professionals can offer better and more consistent care to people living with HS and help improve their quality of life.

Keywords: Hidradenitis suppurativa; Clinical care pathway; Consensus; UAE

Key Summary Points
This consensus statement provides the first region-specific guidelines for the diagnosis and management of hidradenitis suppurativa (HS) in the United Arab Emirates (UAE).
A three-phase modified Delphi methodology involving 14 national experts was used to develop 58 consensus statements tailored to the UAE's unique clinical and demographic landscape.
The recommendations emphasize early intervention, lifestyle modification, comorbidity screening and a stepwise treatment approach incorporating topical agents, systemic antibiotics, biologics and surgical options.
Multidisciplinary care, including psychological support and pain management, is highlighted as essential for addressing the full burden of HS.
This guidance aims to reduce variability in HS care across the UAE and enhance treatment outcomes through standardized, evidence-based clinical pathways.

INTRODUCTION

Hidradenitis suppurativa (HS) is a chronic, inflammatory condition of the pilosebaceous unit that typically occurs after puberty. It is usually presented by painful, deep-seated,

inflamed lesions that develop in apocrine gland-bearing areas, primarily the axillae, groin and anogenital regions [2, 3]. Estimating the prevalence of HS remains challenging owing to frequent misdiagnosis, underdiagnosis and delayed diagnosis. Globally, the reported prevalence of HS is 0.4% (95% confidence interval [CI] 0.26–0.63%) [4]. In Saudi Arabia, the prevalence of HS was estimated to be 4.1% [5]. HS is more common in women globally, with a female-to-male ratio of 3.3:1 [6]. The management of HS is challenging and requires a multifaceted approach tailored to disease severity and individual patient needs.

The impact of HS is substantial, affecting both patients and society. The condition is linked to severe mental health effects, including depression, anxiety and increased suicide risk. Patients with HS have diminished quality of life (QoL) across different domains [7]. In addition, HS has significant implications for equity, productivity and the lost potential of society [8]. Previous reports have shown that HS is associated with a total work impairment of 38%, a combined metric of absenteeism and presenteeism, and 44% overall activity impairment [8].

The burden of the HS in the United Arab Emirates (UAE) remains poorly defined. Although several interdisciplinary centres exist across the country, coordination and communication among these facilities are often limited and fragmented [9]. There is a need to develop a local consensus for the treatment of HS in the UAE to address regional disparities and cater to the specific needs of the patient population. While international guidelines, such as the German S2k HS guidelines, provide a robust foundation, they do not fully mirror the unique demographic, cultural and clinical characteristics prevalent in the UAE [10]. Based on our local clinical experience, unique phenotypes, such as the follicular hyperkeratotic variant, are commonly observed among patients with HS in the UAE. Previous reports have shown a high incidence of metabolic comorbidities, such as diabetes and obesity, in the UAE as well [11]. Thus, the present expert consensus aims to provide evidence-based recommendations for the diagnosis and management of HS in the UAE.

METHODS

This consensus was constructed using a three-phase modified Delphi method, adapted to enhance consensus-building among clinical experts [12, 13] A purposive, non-probability sampling strategy was implemented to enlist 14 experts practising in the UAE, each with an established research profile in dermatology and representing both academic and non-academic sectors.

A comprehensive literature review was conducted via Medline (PubMed) up to July 2024 to inform the survey development and was updated on 5 December 2025. The Survey Development Committee utilised the following keyword combination: ("Hidradenitis Suppurativa"[MeSH]) AND (("Diagnosis"[MeSH]) OR ("Severity of Illness Index"[MeSH]) OR ("Classification"[MeSH]) OR ("Therapeutics"[MeSH]) OR ("Anti-Bacterial Agents"[MeSH]) OR ("Immunologic Factors"[MeSH]) OR ("Biological Products"[MeSH] OR biologic*[tiab]) OR ("Adalimumab"[MeSH]) OR ("Secukinumab"[MeSH]) OR ("Bimekizumab"[Supplementary Concept] OR bimekizumab[tiab]) OR ("Surgical Procedures, Operative"[MeSH]) OR ("Dermatologic Surgical Procedures"[MeSH]) OR ("Excision"[MeSH]) OR ("Laser Therapy"[MeSH]) OR ("United Arab Emirates"[MeSH]) OR ("Practice Guidelines as Topic"[MeSH]) OR ("Consensus"[MeSH])). The primary statements were sourced from studies with level 1 evidence, as classified by Wright et al. [14], while supporting statements from lower-quality evidence were included as necessary. The Survey Committee refined the draft consensus document before voting.

The consensus development proceeded in three phases. Initially, the draft questionnaire, containing binary statements (agree/disagree options), was distributed to experts via email. Experts had the option to add comments and suggest revisions for each statement. Descriptive statistics were applied to quantify expert responses, with statements achieving ≥ 80% agreement considered consensus items [15]. Statements falling below this threshold were modified or removed after expert feedback.

The second phase consisted of an advisory meeting with all experts, focusing on (1) rewording and resolving statements that did not reach consensus in phase 1 and (2) developing, refining and aligning the proposed management algorithms (clinical pathways) with the agreed statements and the UAE clinical context. During these meetings, algorithm structure (including stratification by disease activity and/or severity), key decision points, escalation steps and referral considerations were discussed iteratively until the panel reached agreement on the algorithm content and logic. The final phase involved sending the updated statements and clinical pathway to experts for a concluding round of voting, using the same criteria as in phase one.

All panel members reviewed and approved the final consensus statements and manuscript.

RESULTS AND DISCUSSION

In total, 62 statements were developed on the basis of the literature review findings and sent to the panel for voting (Table S1). Of them, ten statements did not reach consensus levels and were rephrased during the expert meeting for the second round of voting. Only six statements reached the consensus level during the second round of voting. Thus, the present manuscript consists of 58 statements regarding the diagnosis, follow-up and management of HS in the UAE (Tables 1, 2, 3, 4, and 5).

Diagnosis

Table 1 presents the consensus statements regarding the diagnosis and classification of HS.

HS is typically a clinical diagnosis; still, current data show substantial diagnostic delay (average 7.2–10 years from symptom onset), leading to severe disease at diagnosis [16]. The condition presents as a combination of open pseudo-comedones (blackheads), inflammatory nodules, abscesses (cysts), draining tunnels (pus channels) and scarring. These symptoms primarily occur in skin folds, including the armpits, under the breasts, lower abdomen, groin, genitals and buttocks [3, 17, 18]. Secondary infections can develop in the inflammatory nodules, and up to 30% of patients with HS may also develop a pilonidal sinus [2, 17]. The severity of symptoms can vary from mild to severe, with prodromal symptoms often preceding lesion appearance by 12–48 h [18, 19]. The current evidence suggests that nearly one-third of patients with HS have a positive family history [20], while a strong association was demonstrated between HS and smoking or obesity [21, 22]. Typical lesions with a chronic, persistent nature lasting for 3 months or more, or relapsing twice within the last 6 months, are diagnostic of HS (statement 1).

Owing to the overlapping clinical features with other diseases affecting the perianal region [23], HS must be differentially diagnosed from other diseases, including Crohn's disease (CD) and pilonidal cysts. In atypical cases, a biopsy may be considered to exclude dermatological malignancies (statement 2).

Follicular occlusion is a hallmark feature of HS and plays a critical role in its pathogenesis. The follicular occlusion triad represents a chronic inflammatory condition characterised by the concurrent presence of HS, acne conglobata and dissecting folliculitis in a single patient [24]. However, the follicular occlusion tetrad expands this classification by including HS, acne conglobata, dissecting cellulitis and pilonidal sinus [25]. Although data regarding both conditions in the UAE are scarce, they should be considered during the differential diagnosis of HS owing to the observed high rate of follicular occlusion patterns in the country (local experience; statement 3).

Inflammatory markers, such as C-reactive protein (CRP) and erythrocyte sedimentation rate (ESR), are essential in assessing systemic inflammation in patients with clinical signs of infection (statement 4). Evidence also suggests that high-resolution ultrasound (US) is useful in evaluating the extent of HS beyond the visible surface lesions [26]. Magnetic resonance imaging (MRI) can be reserved for complex or refractory cases with perianal involvement [27] (statement 5). The experts agreed that routine microbiological cultures of HS lesions are generally unnecessary, except when secondary infection is

Table 1 Consensus statements regarding the diagnosis of HS

No.	Statements
Diagnostic workup and differential diagnosis	
1	HS should be diagnosed clinically on the basis of the presence of typical lesions such as nodules, abscesses, sinus tracts (tunnels) and scarring in characteristic anatomical areas (axillae, groin, buttocks and inframammary regions). Typical lesions with a chronic, persistent nature lasting 3 months or more, or those that relapse twice within the last 6 months, are diagnostic of HS
2	Differential diagnoses such as pilonidal cysts, furuncles and Crohn's disease should be considered and ruled out on the basis of clinical examination and patient history. Investigations should be directed by the patient's clinical features and targeted at excluding other diagnoses. A biopsy may be considered in atypical cases to exclude dermatological malignancies
3	Owing to the characteristic phenotypes in the UAE, follicular occlusion patterns, including follicular triad and tetrad, should be assessed as part of the differential diagnosis
4	Baseline blood tests, including CBC, CRP and ESR, should be performed for patients with clinical evidence of infection to assess systemic inflammation. These tests serve as indicators of inflammation severity, markers of disease activity and secondary infection, and tools for monitoring treatment response
5	High-resolution US examination can be a useful adjunctive tool in assessing the extent of deep-seated lesions, sinus tracts and abscesses. At the same time, MRI should be reserved for complex or refractory cases to evaluate the full extent of the disease, particularly in perianal involvement
6	Routine microbiological cultures of lesions are not recommended unless there is suspicion of secondary infection or the patient is not responding to standard treatments
7	Baseline monitoring of metabolic parameters, including fasting glucose and lipid profile, is recommended owing to the high prevalence of diabetes in the UAE, as HS is associated with metabolic syndrome. The frequency of follow-up monitoring should be determined by the physician to whom the patient is referred
8	The Hurley staging system should be used to classify the severity of HS at baseline and guide the decision for surgical management in non-inflammatory HS
9	At baseline and during the subsequent visits, HS should be assessed for severity and medical treatment response using the IHS4 and Hurley staging systems. HiSCR 50 should be used to assess treatment response throughout follow-up visits. Additional dynamic scores, such as the HS-PGA and SASH, may be considered
10	PROMs, such as DLQI and pain visual analogue scale, can be used to assess the impact of the disease on the patient's quality of life
11	Healthcare practitioners should consider that non-inflammatory HS cases may still have an inflammatory component, affecting the treatment decision

HS hidradenitis suppurativa, *CBC* complete blood count, *CRP* C-reactive protein, *ESR* erythrocyte sedimentation rate, *US* ultrasound, *MRI* magnetic resonance imaging, *IHS4* International Hidradenitis Suppurativa Severity Score System, *HS-PGA* Hidradenitis Suppurativa Physician's Global Assessment, *SASH* Sartorius Hidradenitis Suppurativa Activity Score, *PROMs* patient-reported outcome measures, *DLQI* Dermatology Life Quality Index

Table 2 Consensus statements regarding monitoring of complications in HS

No.	Statements
Comorbidity assessment	
12	Patients with suspected HS should be assessed for predisposing factors such as smoking, overweight status and having a personal or family history of HS, acne, IBD and rare skin disorders such as steatocystoma multiplex
13	Screening for common comorbidities, such as metabolic syndrome, polycystic ovary syndrome (PCOS), cardiovascular risk factors, IBD, thyroid disorders, spondyloarthritis, psoriasis, arthritis and psychiatric disorders, should be part of the diagnostic workup. Referral to relevant specialists should be considered to manage identified comorbid conditions
Monitoring of complications	
14	Chronic HS can lead to severe complications such as scarring, sinus tract formation and strictures, which can significantly impact quality of life. Thus, chronic HS should be monitored at regular, risk-stratified intervals for complications assessment (typically every 3–6 months in stable disease and every 4–12 weeks during active disease or treatment escalation), adapted to disease severity, treatment and comorbidities
15	Patients with HS are at an increased risk of developing SCC in chronic lesions, especially in long-standing diseases. In case of clinical suspicion of SCC, histological analysis shall be performed
Syndromal HS	
16	Recognising syndromal forms of HS, which may present with a combination of dermatological and systemic symptoms, requires a multidisciplinary approach for diagnosis and management
17	HS with joint involvement, such as SAPHO syndrome, should be considered in patients presenting with musculoskeletal symptoms. Referral to a rheumatologist is recommended for comprehensive management
18	Paediatric syndromal HS, including PASH and PAPASH syndromes, should be identified early for appropriate genetic counselling and management

Screening for listed comorbidities should be performed using standard clinical assessments and guideline-recommended tools (e.g. anthropometric measures, blood pressure, metabolic and endocrine laboratory tests, rheumatologic evaluation, and validated mental health and QoL questionnaires), adapted to local practice and individual patient risk

HS hidradenitis suppurativa, *IBD* inflammatory bowel disease, *PCOS* polycystic ovary syndrome, *SCC* squamous cell carcinoma, *SAPHO* Synovitis, Acne, Pustulosis, Hyperostosis, and Osteitis, *PASH* Pyoderma Gangrenosum, Acne, and Hidradenitis Suppurativa, *PAPASH* Pyogenic Arthritis, Pyoderma Gangrenosum, Acne, and Hidradenitis Suppurativa

suspected or when patients do not respond to treatment (statement 6).

The association between HS and metabolic syndrome-related conditions, such as obesity, hypertriglyceridemia, diabetes, and other conditions, is well-documented. In a large cohort study, patients with HS had a significantly higher prevalence of metabolic and cardiovascular conditions compared with controls. HS was also an independent risk factor for cardiovascular events [28]. Thus, baseline monitoring of body mass index (BMI), blood pressure and

Table 3 Consensus statements regarding the conventional therapies of HS

No.	Statements
General management	
19	Patients with HS should receive counselling for weight loss, dietary modification and smoking cessation as needed
20	The choice of medical therapy for HS should be guided by the severity of the disease, the presence of comorbidities and patient preferences. A stepwise approach should be adopted, starting with less invasive treatments and progressing to more aggressive therapies on the basis of the patient's response
Topical and systemic antibiotics	
21	Topical clindamycin 1% solution or gel applied twice daily is recommended for mild HS
22	Given their anti-inflammatory properties, oral doxycycline (100 mg BID) is the first-line systemic antibiotic for moderate-to-severe HS
23	For patients with moderate-to-severe HS who are not responding to oral doxycycline, combination antibiotic therapy with oral clindamycin and rifampicin (300 mg BID for both) for 10–12 weeks may be considered as second-line therapy
24	Long-term use of antibiotics beyond 10–12 weeks may be necessary for some patients; however, the risks and benefits should be carefully weighed, and regular monitoring for antibiotic resistance is essential
25	Intravenous antibiotics can be administered as rescue therapy or as bridging therapy before surgery. Other antibiotic regimens, such as rifampicin, moxifloxacin and metronidazole, can be applied on the basis of the clinician's decision and results of bacterial culture and drug sensitivity testing
Intralesional therapy	
26	Intralesional corticosteroid injections (e.g. triamcinolone acetonide) can be used to reduce inflammation and pain in acute nodules and abscesses
Retinoids	
27	Oral retinoid therapy may be considered an alternative treatment option for moderate-to-severe HS, especially for patients with follicular hyperkeratosis type of HS or a history of severe acne
28	Retinoids should be avoided in women of childbearing age
Hormonal therapies	
29	Oral hormonal antiandrogen therapy with ethinylestradiol and cyproterone acetate is recommended for female patients with HS who experience cycle-associated flare-ups or have PCOS
30	Hormonal antiandrogen therapy should not be used as the primary monotherapy for HS. It is most effective when used as part of a combination-therapy approach

Table 3 continued

No.	Statements
31	Hormonal antiandrogen therapy should be initiated in collaboration with a gynaecology specialist. Continued management and prescription of this therapy should be handled by dermatologists experienced in hormonal treatments
32	Metformin should be considered as an alternative adjunct treatment option, particularly given the association between HS and metabolic disorders
Other immunosuppressive and immunomodulatory agents	
33	Immunosuppressant or immunomodulatory agents, such as cyclosporine, dapsone, colchicine and systemic corticosteroids, may be used for moderate-to-severe HS but require close monitoring for adverse effects

HS hidradenitis suppurativa, *BID* twice daily, *PCOS* polycystic ovary syndrome

metabolic parameters, including fasting glucose and lipid profiles, is highly recommended for patients with HS in the UAE, given the strong association between HS and metabolic syndrome and the high prevalence of diabetes in the region (statement 7). Studies reveal a concerning prevalence of metabolic syndrome in the UAE, with a rate of 37.4% overall and a significant burden among young adults, exceeding global averages in similar age groups [29].

In the clinical management of HS, comprehensive classification and monitoring are critical for guiding treatment. The Hurley staging system (HSS) is a widely adopted tool used to classify baseline severity and make informed decisions on surgical and medical management for both inflammatory and non-inflammatory cases of HS (statement 8) [30]. A recent systematic review from the Middle East found that the HSS was the most commonly used grading system in clinical practice in the region [11].

However, baseline and follow-up assessments should incorporate both the HSS and the International HS Severity Score System (IHS4), which enhances objectivity by weighting primary lesions, such as nodules, abscesses and draining fistulas (tunnels) [31]. This combination allows for ongoing assessment of disease severity and therapeutic response over time. IHS4 is particularly effective in clinical practice and research, having demonstrated high validity (rho > 0.6) relative to other scoring systems [32]. In addition, dynamic scores such as the Hidradenitis Suppurativa-Physician's Global Assessment (HS-PGA) and Severity and Area Score for Hidradenitis (SASH) can be employed to refine assessment in specific contexts or monitor disease changes between visits (statement 9). Although some other dynamic scoring systems are available, they have only limited practical value in some situations.

The burden of pain and its effect on the QoL in patients with HS highlights the importance of patient-reported outcome measures (PROMs). Validated tools, such as the Dermatology Life Quality Index (DLQI), should be integrated into assessments to capture the impact of HS from the patient's perspective (statement 10). These PROMs are straightforward to conduct and provide essential insights into the physical, social and emotional burden of HS [33].

When evaluating treatment options, healthcare practitioners (HCPs) should be aware that cases of clinically non-inflammatory HS – those without overt signs of inflammation – may still harbour underlying inflammatory activity, which can significantly influence therapeutic decision-making (statement 11).

Comorbidities and Complications

HS is commonly associated with various comorbidities and complications. Among these, axial spondyloarthritis is notably prevalent, with patients with HS showing a threefold higher risk of inflammatory arthritis. Studies have

Table 4 Consensus statements regarding the biologics and procedural management of HS

No.	Statements
Biologics	
34	Biological therapies (e.g. adalimumab, secukinumab and bimekizumab) are recommended for adult patients with moderate-to-severe HS who have an inadequate response to systemic HS therapies
35	Biological therapy with adalimumab is recommended for adolescents aged 12–17 years with moderate-to-severe HS with an inadequate response to systemic HS therapies
36	The combination therapy of biologics with systemic antibiotics or surgical intervention may be considered for patients with an inadequate response to conventional systemic HS therapy. The combination can also be considered in patients with mixed non-inflammatory and inflammatory conditions, where both biologic treatment and surgery may be necessary
37	Transient dose intensification of adalimumab may be considered in: Patients with partial response Patients with a reduction of response to adalimumab over time
38	Off-label use of adalimumab may be considered in paediatric cases; large-scale trials specific to paediatric patients with HS are needed to confirm these findings
39	Alternative treatments related to TNF-α (infliximab), IL-1 (anakinra), IL-17 (brodalumab and ixekizumab), IL-12p40/IL-23 inhibitors (ustekinumab) or Janus kinase (upadacitinib and povorcitinib) pathway inhibition can be considered after failure of or intolerance to recommended biologic treatment
Surgical interventions	
40	Incision and drainage should be considered for acute, painful abscesses as a temporary relief measure. It does not provide a long-term solution for HS
41	De-roofing is recommended for superficial tunnels
42	Lesional excision is recommended for recurrent nodules, abscesses and sinus tracts (tunnels) in mild-to-moderate HS
43	In eligible patients, complete local or regional excision is a recommended treatment option for patients with moderate-to-severe HS
44	Primary closure should be considered for small defects resulting from surgical excision, ensuring minimal tension on the wound edges to promote healing. Secondary intention healing should be utilised for larger defects
45	Skin grafting or flap procedures should be considered for extensive defects
Laser treatment	
46	CO_2 ablative laser therapy is a treatment option for mild-to-moderate HS
47	Hair follicle destruction using long-pulsed Nd:YAG laser, long-pulsed alexandrite laser or IPL therapy is a treatment option for mild-to-moderate HS

Table 4 continued

No.	Statements
Pain therapy	
48	Pain management should involve a multidisciplinary team, including dermatologists, pain specialists and primary care providers, to create a comprehensive pain-management plan
Psychological therapy	
49	Referral to mental health professionals, including psychologists and psychiatrists, should be considered for patients showing signs of significant psychological distress
Management of complications	
50	A multidisciplinary approach should be considered to manage the diverse complications of HS, involving dermatologists, surgeons, infectious disease specialists, rheumatologists, endocrinologists and mental health professionals
51	Systemic antibiotics and biologic therapies should be tailored to manage both the primary disease and prevent secondary infections or complications in patients with HS

HS hidradenitis suppurativa, *TNF-α* tumour necrosis factor-alpha, *IL* interleukin, *JAK* Janus kinase, *Nd:YAG* neodymium-doped yttrium aluminium garnet, *IPL* intense pulsed light

confirmed that patients with HS with axial spondyloarthritis often experience more severe disease activity than those without HS [34]. Inflammatory bowel diseases (IBD), such as CD and ulcerative colitis (UC), are also significantly associated with HS [35]. As previously mentioned, HS is significantly associated with a higher prevalence of metabolic and cardiovascular conditions [28]. Although international HS guidelines do not yet recommend routine thyroid screening, emerging evidence of increased thyroid dysfunction in HS led the panel to recommend targeted thyroid testing in the UAE, particularly for symptomatic or endocrine high-risk patients [36]. Other comorbidities in HS include alopecia areata, Down syndrome, keratinisation disorders, and Synovitis, Acne, Pustulosis, Hyperostosis, Osteitis (SAPHO) syndrome [31]. In addition, life expectancy decreases significantly in severe HS. Thus, the experts agreed that screening for predisposing factors and common comorbidities is essential during the diagnosis of HS. Referral to relevant specialists should be considered to manage identified comorbid conditions (Table 2; statements 12 and 13).

Local complications in HS involve recurrent infections, which can mimic disease flares, and chronic lymphedema, especially in severe or anogenital HS, leading to scrotal elephantiasis and lymphatic obstruction [34]. Other local issues include scarring, contractures and potential urethral or anal strictures, causing movement limitations and recurrent infections [31]. In advanced cases, fistulas may form, connecting to organs such as the bladder, rectum or peritoneum, and should prompt evaluation for coexisting CD [34]. Thus, chronic HS should be monitored at regular, risk-stratified intervals for complications assessment (typically every 3–6 months in stable disease and every 4–12 weeks during active disease or treatment escalation) and adapted to disease severity, treatment and comorbidities (statement 14). In clinical practice, screening should rely on standard, guideline-recommended tools and assessments (e.g. BMI and blood pressure measurement; fasting glucose, HbA1c, and lipid profile; targeted hormonal panels for PCOS and thyroid dysfunction; musculoskeletal evaluation with rheumatology referral where appropriate; and validated instruments such as PHQ-9/GAD-7 and DLQI for mental health and QoL), tailored to individual risk factors and local resource availability.

Systemically, HS is often associated with chronic pain, anaemia and hypoproteinaemia; in contrast, systemic amyloidosis is a rare but

Table 5 Consensus statements regarding unmet medical needs in management of HS

No.	Statements
Diagnostic delay	
52	Several measures can be taken to avoid diagnostic delays in the UAE. This includes: Increase awareness and education about HS among healthcare providers, including general practitioners, dermatologists and other specialists, to recognise early signs and symptoms of HS Implement routine screening for HS in patients presenting with recurrent abscesses or nodules in characteristic areas to ensure early detection Encourage patients to seek medical advice promptly if they experience recurrent or chronic lesions in the axillae, groin, buttocks or inframammary regions Develop and distribute educational materials for patients and the public to increase awareness of HS and reduce the stigma associated with the disease Establish referral pathways and multidisciplinary teams for timely evaluation and management of suspected HS cases
Future research	
53	There is a lack of evidence on the optimal duration of treatment for HS. Research is needed to define the window of opportunity on the basis of patient history, disease severity and treatments used. This includes determining when certain medications should be discontinued to avoid unnecessary prolonged exposure and potential side effects
54	Clear criteria for when to shift medications are lacking. Criteria should be developed to guide clinicians on when to consider changing medications on the basis of factors such as inadequate response, side effects and changes in disease severity
55	The potential role of newer weight loss medications in the management of HS is under-researched. Studies are needed to assess the efficacy and safety of these medications in reducing HS severity, particularly in patients with obesity
56	There is insufficient evidence on the benefits and risks of combining surgical interventions with biologic treatments in HS. Research should focus on assessing the potential advantages and risks of this combination, particularly when initiated at the early stages of treatment
57	Guidelines for discontinuing biologic treatments in HS are not well-established. Studies are needed to develop evidence-based guidelines to determine when and how to safely discontinue biologic therapy without causing disease flare-ups
58	The importance of administering vaccines to patients with HS, particularly those in specific stages of the disease, needs to be recognised. This is crucial for planning future treatments such as JAK inhibitors or biologics, as certain vaccinations might be necessary prior to initiating these therapies

HS hidradenitis suppurativa, *UAE* United Arab Emirates, *JAK* Janus kinase

serious complication that has been reported in long-standing, severe disease [37]. Squamous cell carcinoma (SCC) is a particularly serious complication of long-standing, untreated HS, especially in patients with extensive and chronic lesions in the genital, perineal and gluteal regions. SCC in HS tends to have a high metastatic potential and poor prognosis, with studies indicating a mortality rate as high as 59% for those affected [38]. Risk factors for developing SCC in patients

with HS include prolonged disease duration, nicotine use and human papillomavirus (HPV) infection [39]. Thus, patients with HS with clinical suspicion of SCC should undergo a biopsy (statement 15).

Syndromal HS encompasses cases where HS occurs as part of a broader syndrome, presenting with dermatologic and systemic symptoms. Recognising these syndromal forms is essential, as they often require a multidisciplinary approach for accurate diagnosis and effective management (statement 16). One of the most prominent syndromal forms is Pyoderma Gangrenosum, Acne, and HS (PASH) syndrome, which combines severe skin and joint inflammation with HS, driven by IL-1-related inflammatory pathways [40].

In cases where HS presents alongside musculoskeletal symptoms, SAPHO syndrome should be considered. Patients with HS and joint involvement should be referred to a rheumatologist for comprehensive assessment (statement 17). Paediatric syndromal forms, such as PASH and PAPASH syndromes, should prompt timely genetic counselling and proactive management (statement 18).

Management:

General Principles

Lifestyle modifications, particularly weight loss and smoking cessation, are critical components of HS management, as they can significantly impact disease progression and severity (statement 19). Weight loss has been shown to correlate with increased odds of HS remission; studies indicate that substantial weight loss (>15%) has also been associated with a reduction in HS severity [41]. Likewise, it was shown that patients who stopped smoking or who had never smoked had higher rates of disease remission than active smokers [42]. Alongside these changes, dietary modifications, such as reducing the intake of brewer's yeast and dairy products and adopting a Mediterranean diet, have shown some benefits, although the evidence remains limited [43].

The choice of medical therapy in HS should be tailored to the individual patient, considering disease severity, comorbidities and patient preferences. A stepwise approach is recommended, starting with the least invasive treatments and escalating as needed on the basis of treatment response and disease progression (Table 3; statement 20).

Topical and Systemic Antibiotics

Topical clindamycin 1% solution or gel is recommended as a first-line treatment for mild HS (statement 21). Clindamycin has demonstrated efficacy in reducing inflammatory lesions, with clinical trials showing it to be superior to placebo and comparable in efficacy to oral tetracyclines [44]. Despite its benefits, bacterial resistance to clindamycin has been increasing; therefore, knowledge of local resistance profiles and avoidance of unnecessary empiric antibiotic use is essential [30].

For moderate-to-severe HS, oral doxycycline is the preferred first-line systemic antibiotic owing to its anti-inflammatory properties (statement 22). Tetracyclines (e.g. doxycycline, lymecycline and minocycline) have shown notable efficacy in managing HS, with significant reductions in disease activity scores, such as IHS4, following a 12-week course [45, 46]. When doxycycline is insufficient, combining oral clindamycin and rifampicin may be considered (statement 23); this combination has shown response rates of up to 93% in observational studies [30]. Studies comparing clindamycin–rifampicin with adalimumab have found comparable outcomes in achieving HS Clinical Response (HiSCR50) [45].

While the standard duration for antibiotic therapy in HS is 10–12 weeks, some patients with severe, refractory disease may require extended treatment. Long-term use beyond 12 weeks should be carefully considered, balancing benefits with the risk of developing antibiotic resistance, and should be accompanied by regular monitoring (statement 24). Intravenous (IV) antibiotics, such as ceftriaxone and ertapenem, may serve as rescue or bridging therapies before surgery in severe cases [31]. Additional combination regimens, such as rifampicin–moxifloxacin–metronidazole, can also be applied for

severe HS on the basis of clinical judgement and bacterial culture results (statement 25). These therapies provide a more aggressive approach in patients who have not responded to conventional oral antibiotics, though international guidelines recommend limiting antibiotic classes to 12-week courses to mitigate resistance [30, 31, 47].

Intralesional therapy

Intralesional corticosteroids (ICSs) can alleviate inflammation and pain in patients with HS (statement 26). Previous studies have shown that ICS led to a complete resolution in 70.4% of inflammatory and non-inflammatory nodules in HS [48]. However, the evidence remains inconclusive, with another trial showing no difference between intralesional triamcinolone and placebo [49].

Retinoids

Oral retinoids, including acitretin [50, 51], isotretinoin [52, 53] and alitretinoin [49, 54], may serve as alternative treatment options for moderate-to-severe HS, particularly in patients with the follicular hyperkeratosis subtype or a history of severe acne (statement 27). Retinoids exert their effects by modulating inflammatory mediators such as IL-6 and IFN-γ and reducing keratinocyte proliferation, which can help manage the hyperkeratosis seen in some HS cases [44, 47]. However, evidence regarding their efficacy in HS lesions is limited, with variable outcomes across studies [44]. For instance, acitretin was found to be associated with high recurrence rates [55], alitretinoin's modest benefits are supported only by small open-label studies, and isotretinoin may precipitate HS flares [56]; therefore, oral retinoids should be reserved for carefully selected patients and used with caution, particularly in women of childbearing age owing to the risk of teratogenicity (statement 28) [57].

Hormonal therapies

Hormonal antiandrogen therapy (HAT) with a combination of ethinylestradiol and cyproterone acetate is recommended for female patients with HS, particularly those who experience cycle-related flare-ups or have polycystic ovary syndrome (PCOS) (statement 29). The association of HS with hormonal fluctuations is suggested by perimenstrual exacerbations, rare postmenopausal cases and improvement during pregnancy, highlighting a possible endocrine influence on the disease [43]. HAT may be used as monotherapy for mild-to-moderate HS cases, while more severe cases often benefit from a combination approach with other treatments, such as antibiotics or biologics (statement 30). A trial comparing ethinylestradiol/norgestrel with ethinylestradiol and cyproterone acetate found that both combinations led to a satisfactory clinical response, supporting their use in HS treatment [58]. Nonetheless, HAT should not be considered a primary therapy for HS; instead, it works best as part of a comprehensive, multimodal treatment strategy [31].

Initiating hormonal therapy in HS should be carried out in collaboration with a gynaecologist, and ongoing management should be overseen by dermatologists with experience in hormonal treatments. This approach ensures both safe and effective integration of hormonal therapy into the broader treatment regimen, potentially improving outcomes for female patients with hormone-sensitive HS (statement 31).

In addition to the abovementioned treatment, spironolactone is used at doses of 100–150 mg daily for HS [30]. Recent reports also indicate the potential benefits of metformin in HS, attributed to its anti-androgenic and anti-inflammatory effects (statement 32) [59]. In adults with normal renal function, it is typically initiated at 500 mg once daily and titrated as tolerated to 1500 mg/day in three divided doses, in line with published HS series [60, 61].

Other immunosuppressive and immunomodulatory agents

Immunosuppressive and immunomodulatory agents have also shown promising results for moderate-to-severe HS [30, 31, 47]. Cyclosporine A has shown variable but sometimes meaningful benefit in severe, treatment-refractory hidradenitis suppurativa, ranging from dramatic

improvement in individual cases to moderate response in single-patient analyses and only slight improvement in about half of patients in a larger cohort [62–65]. In addition, a retrospective series of 13 patients with recalcitrant HS treated with low-dose oral prednisone (2.5–10 mg/day) alongside other systemic therapies reported clinical improvement in 11/13 patients, suggesting that carefully monitored low-dose systemic corticosteroids may serve as a useful adjunct in selected refractory cases [66]. A systematic review and multiple series of dapsone report clinical improvement in roughly half to two-thirds of treated patients, albeit with frequent haematologic or gastrointestinal adverse events. While data on colchicine are mixed, early monotherapy trials showed little benefit, but later, combination regimens with tetracyclines demonstrated meaningful reductions in IHS4, Hurley stage and DLQI in selected patients [67, 68]. These options may be considered as third-line or adjunctive options in selected patients with HS, particularly those with metabolic syndrome or those with moderate-to-severe cases (statement 33), and should always be used with close monitoring for adverse effects.

Biologic therapy

Biological therapies provide key options for managing moderate-to-severe HS, with three approved biologics currently – adalimumab, secukinumab and bimekizumab – in the UAE. The evidence supporting these therapies has been extensively reviewed in previous reports [43, 44], which is beyond the scope of this consensus. Adalimumab was approved by the European Medicines Agency (EMA) and the Food and Drug Administration (FDA) for moderate-to-severe HS in adults and adolescents on the basis of phase III trials, PIONEER I and II, which demonstrated significant efficacy [69]. The efficacy of adalimumab (160 mg on day 1 and 80 mg on day 15; starting on day 29, the maintenance dose is either 40 mg every week or 80 mg every other week) was also established in real-world studies [70].

Secukinumab, a monoclonal antibody targeting IL-17A, has also been approved for adult patients with an inadequate response to at least one full 10–12-week course of systemic conventional therapies, or documented intolerance or contraindications to such treatments. Pivotal trials showed that secukinumab (300 mg every 2 weeks and 300 mg every 4 weeks) demonstrated lasting efficacy and a manageable safety profile [71]. Bimekizumab (320 mg, given every 2 weeks for the first 16 weeks, followed by every 4 weeks thereafter), a monoclonal antibody targeting both IL-17A and IL-17F, has been approved by the EMA and FDA for adult patients with moderate-to-severe HS who have not responded to conventional systemic treatment [72].

The experts agreed that the approved systemic biologics are recommended for patients with moderate-to-severe HS and who have an inadequate response to systemic HS therapies according to their age indication (Table 4; statements 34 and 35).

In 2021, the SHARPS trial demonstrated that adalimumab plus surgical treatment was associated with significantly higher response rates compared with surgery alone, without a significant increase in the risk of wound infections or other postoperative complications. The addition of adalimumab also did not result in treatment interruption before surgery [73]. Thus, the experts agreed that combination therapy of biological therapies with systemic antibiotics or surgical intervention may be considered for patients with inadequate response to systemic therapy or mixed HS phenotype (statement 36). However, further evidence is still needed.

Although adalimumab should be stopped after 12 weeks in patients with no response, data show that extending treatment duration is beneficial for patients with a partial response at week 12 [74]. In those patients, treatment intensification (80 mg/week for at least 4 weeks) was found to achieve a significant increase in response rate [75, 76]. Thus, transient dose intensification may be considered in those with partial response or a response reduction over time (statement 37).

The experts also agreed that off-label use of adalimumab may be considered in paediatric cases (statement 38).

Alternative therapies targeting specific inflammatory pathways have shown promise in HS, including agents targeting TNF-α, IL-1, IL-17,

IL-12/IL-23, and the Janus kinase (JAK) pathway, offering additional therapeutic avenues for refractory HS (statement 39). Infliximab, a TNF-α inhibitor, has shown promising results, with up to 60% of patients achieving partial symptom reduction in phase II trials. JAK inhibitors, such as tofacitinib, povorcitinib and upadacitinib, have demonstrated positive outcomes in severe HS cases. Other options include IL-1 inhibitor anakinra, IL-17 inhibitors brodalumab and ixekizumab, and IL-12/IL-23 inhibitor ustekinumab, each with potential for HS management, particularly in cases with additional autoimmune or inflammatory components. However, larger trials are necessary to validate their efficacy and safety in HS [31, 47, 77].

Surgical Interventions

Surgery is an important approach in the management of HS, especially for patients with recurrent or refractory lesions. Incision and drainage can provide quick relief from pain and pressure in acute, painful abscesses (statement 40), but it is not a long-term solution, as recurrence rates are nearly 100%. This technique is typically reserved for urgent symptom relief rather than lasting disease control [78]. De-roofing is recommended for localised lesions, particularly in Hurley stages I–II (statement 41). With recurrence rates of 20–40%, de-roofing has proven to be a more durable solution than incision and drainage, and it can be combined with sinus tract (tunnel) excision to enhance clinical outcomes and reduce recurrence further [79].

In cases of recurrent nodules, abscesses or sinus tracts (tunnel) in mild-to-moderate HS, lesional excision can be an effective treatment (statement 42). This approach yields results similar to de-roofing but with potentially fewer recurrences when combined with additional treatments [44]. For patients with moderate-to-severe HS, wide excision is indicated (statement 43). Negative pressure dressings can produce better results in cases of wide excision and skin flap applications.

Following excision, primary closure may be feasible for small defects, with care to minimise wound tension. Larger wounds often benefit from secondary intention healing, which allows the wound to heal naturally and reduces the risk of recurrence. For extensive defects, skin grafting or flap procedures (fasciocutaneous flaps) are recommended, as they cover the wound and provide durable, low-recurrence outcomes. Location can also affect recurrence rates, with excisions in breast, vulvar and perianal regions often showing higher recurrence (statements 44 and 45) [44].

In cases where medical treatments, particularly biologics, are used alongside surgery, recurrence rates can further decrease, enhancing long-term control of HS [80].

Laser Treatment

Laser treatment options, particularly CO_2 ablative lasers, are effective for mild-to-moderate HS (statements 46 and 47), as they can reduce inflammation and remove superficial lesions [81]. Hair follicle-targeted treatments, such as long-pulsed neodymium-doped yttrium aluminium garnet (Nd:YAG) lasers, alexandrite lasers and intense pulsed light (IPL), are beneficial for managing follicular inflammation and can reduce lesion recurrence by limiting hair growth, which is associated with HS flare-ups [44]. Although promising, laser protocols are not yet standardised, and larger randomised controlled trials are needed to establish optimal laser settings for HS treatment [43].

Supportive Treatment

HS is often associated with significant pain, which can persist even after inflammation is managed. Pain control in HS requires a comprehensive approach, involving dermatologists, pain specialists and primary care providers. Multidisciplinary collaboration can help address the complex nature of HS pain, which is frequently linked to both physical and psychological distress, often requiring individualised treatment plans (statement 48) [31].

Given the substantial psychological burden of HS, including high rates of depression, social anxiety and suicidal ideation, patients with significant psychological distress should be referred to mental health professionals [82]. Psychological therapy, such as

psychoeducation about disease progression, can help patients understand and manage HS-related challenges [43, 44]. In addition, addressing perceptions, fostering supportive social environments and motivating lifestyle improvements, such as smoking cessation and calorie-conscious nutrition, are essential to holistic HS care [47]. Collaboration with psychotherapists may also be warranted for patients with severe mental health needs (statement 49).

The varied complications of HS benefit from a multidisciplinary approach, particularly as patients may experience systemic infections, joint involvement, endocrine issues and psychological distress. Collaboration across specialities, including dermatology, infectious disease, rheumatology, endocrinology and mental health, helps tailor management plans for each patient (statement 50). Antibiotic and biological therapies should be customised to manage both primary HS symptoms and secondary infections, reducing complications while enhancing treatment outcomes (statement 51).

Lastly, it is worth noting that there are critical windows of opportunity that should not be overlooked to achieve optimal outcomes in patients with HS. The first is early diagnosis, which requires heightened awareness among all physicians regarding the diagnostic criteria and the importance of referring patients to a dermatologist, even when there is only a suspicion of the disease. The second opportunity lies in recognising Hurley stage II as a pivotal phase, where early initiation of biologic therapy combined with appropriate surgical intervention can effectively halt the progression and worsening of the condition.

Management Algorithm

For mild HS (low IHS4), topical 15% resorcinol has been evaluated in small prospective and long-term studies, showing reductions in pain, lesion size and IHS4 scores, albeit with irritant dermatitis in some patients [83–85], while a randomized, double-blind, placebo-controlled pilot trial of botulinum toxin type B and emerging series with botulinum toxin type A have demonstrated meaningful improvements in pain, suppuration and QoL, particularly in patients with concomitant hyperhidrosis [86, 87]. In moderate-to-severe HS, apremilast has shown promising activity in several case reports, a small randomized trial and an open-label phase 2 study, with clinically relevant reductions in inflammatory lesions and DLQI, supporting its consideration as an oral option when standard systemic therapies are inadequate or not tolerated [88–91]. Non-invasive device-based approaches such as intense pulsed light (IPL) combined with radiofrequency have also been investigated in prospective cohorts, reporting significant decreases in inflammatory lesion counts and improvements in QoL, with a favourable safety profile [92, 93]. Finally, zinc gluconate has been explored in a pilot study and subsequent series, where daily oral zinc (often 90 mg/day, sometimes combined with nicotinamide) led to partial or complete clinical responses in many patients with mild-to-moderate HS, though relapses and gastrointestinal intolerance can occur [94,95]. These data underpin the inclusion of resorcinol peeling, botulinum toxin, apremilast, radiofrequency/IPL and zinc gluconate in our algorithm as adjunctive, specialist-led options for carefully selected patients, rather than first-line standard of care.

Figures 1 and 2 show the proposed algorithm for managing HS in the UAE.

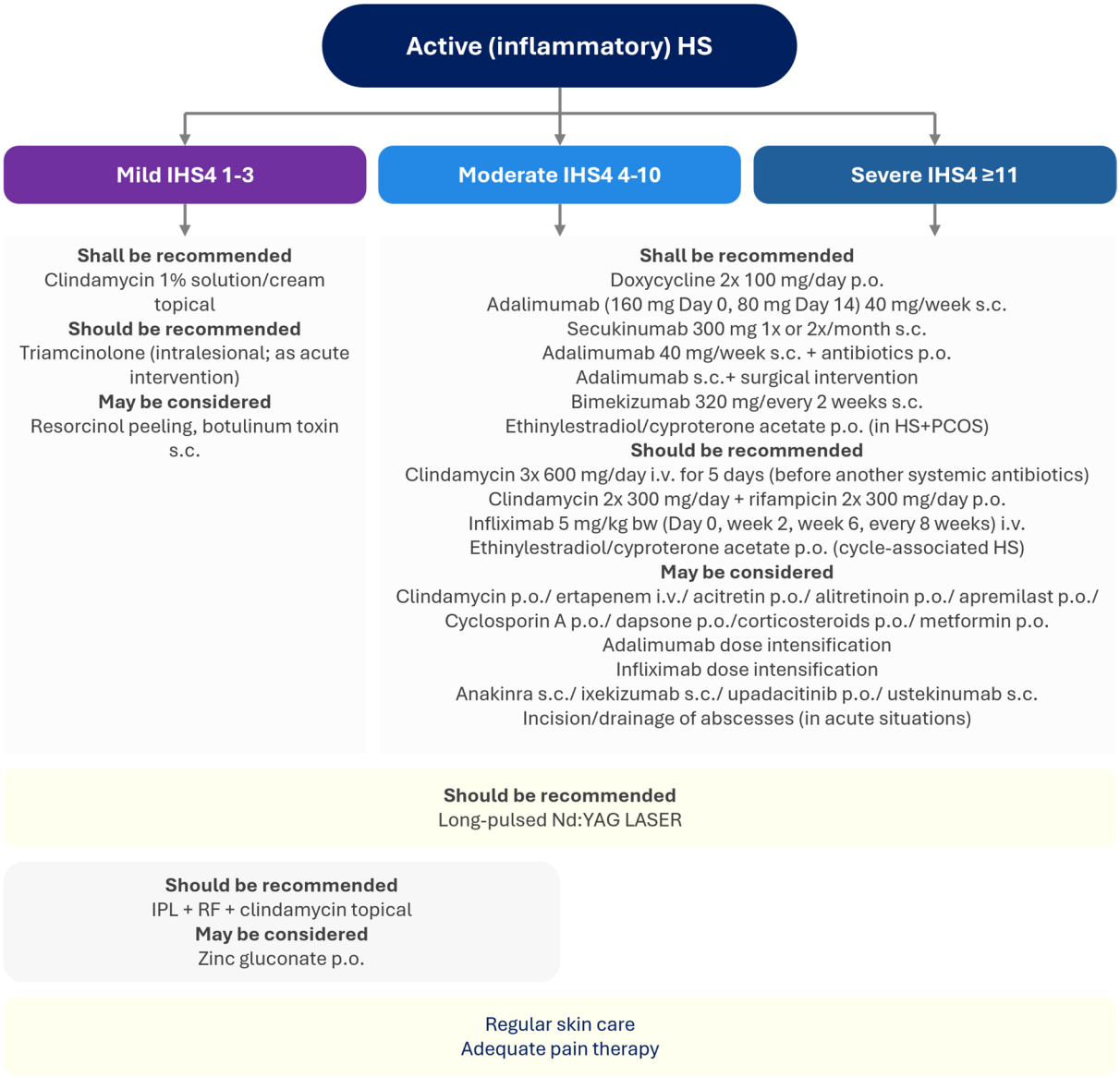
Fig. 1 Active (inflammatory) hidradenitis suppurativa management algorithm. HS, hidradenitis suppurativa; IHS4, International Hidradenitis Suppurativa Severity Score System; p.o., per os (oral administration); s.c., subcutaneous; i.v., intravenous; bw, body weight; PCOS, polycystic ovary syndrome; Nd:YAG, neodymium-doped yttrium aluminium garnet; IPL, intense pulsed light; RF, radiofrequency. Adapted with UAE-specific modifications from Zouboulis et al. [95] and Zouboulis et al. [1] ▶

Unmet Medical Needs

Timely diagnosis remains a significant unmet need in HS management within the UAE. Increasing awareness among HCPs, including

General Care

Screen for comorbidities and refer to specialists if needed
Advise on wound care and pain management
Recommend smoking cessation, weight reduction, and dietary modification



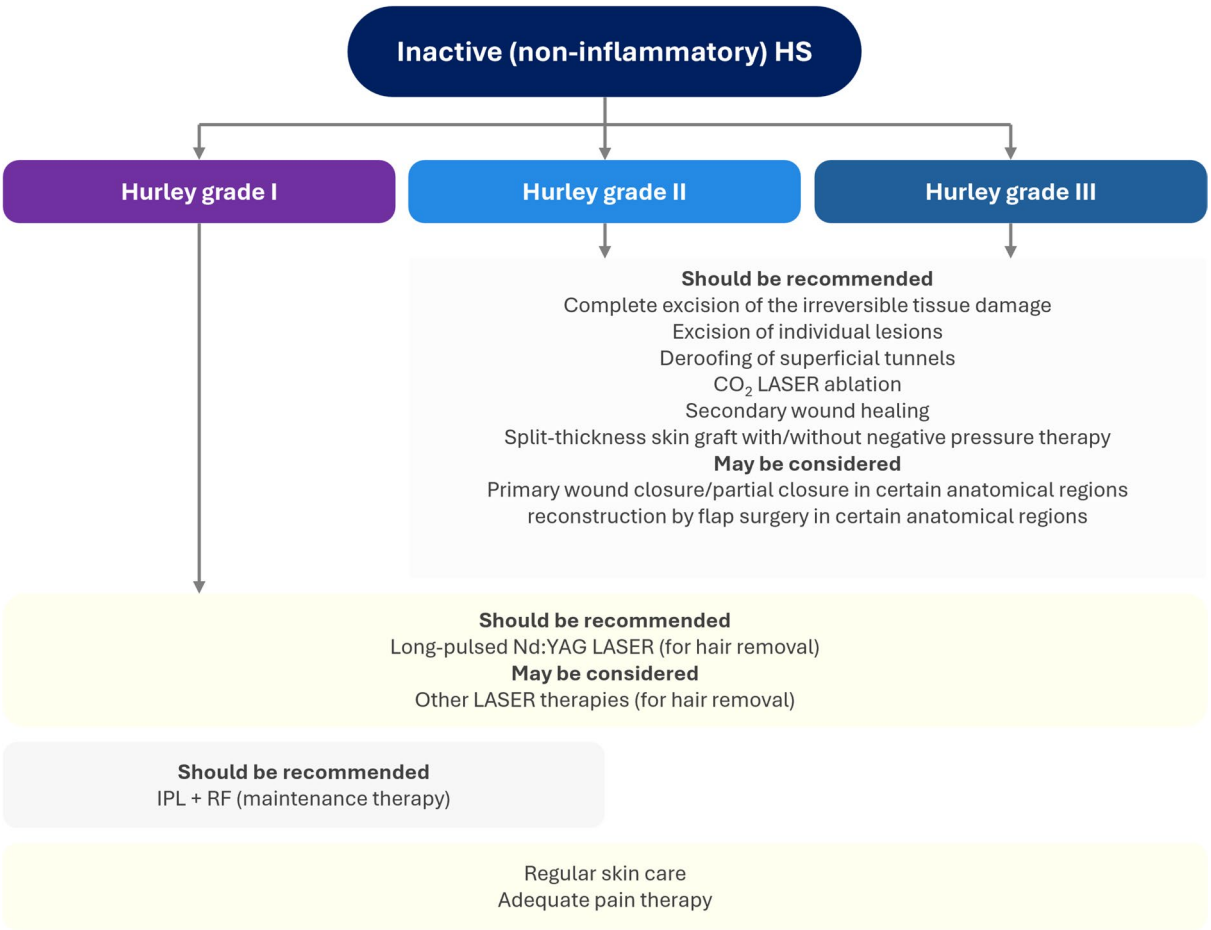


Fig. 2 Inactive (non-inflammatory) hidradenitis suppurativa management algorithm. Regular skincare should include gentle daily cleansing with non-irritating cleansers, careful drying of skin folds, use of bland emollients and avoidance of harsh soaps, scrubbing and friction-inducing clothing. HS, hidradenitis suppurativa; CO_2, carbon dioxide; CO_2 laser, carbon dioxide laser; Nd:YAG, neodymium-doped yttrium aluminium garnet; IPL, intense pulsed light; RF, radiofrequency. Adapted with UAE-specific modifications from Zouboulis et al. [95] and Zouboulis et al. [1]

general practitioners, dermatologists and other specialists, is essential for recognising early indicators of HS, thereby facilitating prompt intervention. Systematic screening in patients with recurrent abscesses or nodules in characteristic anatomical regions could enhance early identification. In addition, empowering patients to seek medical attention promptly when experiencing persistent lesions in areas such as the axillae, groin, buttocks or inframammary regions may expedite the diagnostic process. Educational campaigns targeting patients and the general public can reduce HS's stigma, creating a supportive environment for early diagnosis. Finally, establishing structured referral pathways and multidisciplinary teams dedicated to timely evaluating suspected HS cases would significantly strengthen the continuum of care (statement 52).

Substantial research gaps persist in the optimal treatment approaches for HS, particularly regarding duration, transition points for therapy and novel interventions (statement 53). There is a pressing need for robust studies to define the therapeutic "window of opportunity" for HS treatment, considering disease history, severity

and treatment type. Evidence-based criteria to guide therapeutic shifts are also necessary to assist clinicians in determining when to modify treatments, whether due to suboptimal response, adverse effects or evolving disease dynamics (statement 54).

Further, the efficacy and safety of newer weight-loss and a combination of newer weight-loss medications with biologics, especially for patients with obesity, warrant rigorous investigation (statement 55). Limited evidence exists on the potential advantages and risks of combining surgical procedures with biological therapies, mainly when applied at early disease stages, calling for studies to elucidate the benefits of these integrative approaches (statement 56). In addition, clear guidelines for the safe discontinuation of biologics are needed to prevent relapse while optimising long-term disease control (statement 57).

Finally, vaccination strategies tailored to patients with HS, particularly in preparation for advanced therapies such as JAK inhibitors or biologics, represent an important but underresearched area (Table 5; statement 58). Addressing these critical knowledge gaps through well-designed studies will advance evidence-based care for patients with HS in the UAE and beyond.

CONCLUSIONS

The management of HS requires a comprehensive, multidisciplinary approach that integrates lifestyle modifications, pharmacological treatments, surgical interventions and psychosocial support to effectively address the disease's complexity. Early intervention, including weight management and smoking cessation, plays a crucial role in disease control, while tailored medical therapy based on disease severity and patient preferences enhances therapeutic outcomes. The window of opportunity for early diagnosis and appropriate intervention to prevent worsening should be a priority to achieve the best holistic results. This consensus provides updated recommendations for managing HS in the UAE, focusing on diagnostic, therapeutic and surgical strategies.

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Declarations

Conflict of Interest. Ahmed Ameen, Fatima Albreiki, Ayman Alnaeem, Muna Al Murrawi, Huda R. Ali, Raghda Almaashari, Fatima Al-Marzooqi, Jawaher Alnaqbi, Hussein A. Dayem, Mohammed Ahmed, Waqas Saad, Srikumar Goturu, Samir Hantirah, Ashraf Reda and Christos C. Zouboulis declare that they have no conflicts of interest to disclose.

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