

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

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Table S1: Original Statements with results of 1st & 2nd voting

No.	Original Statement	1 st Round Voting	Second Round Voting	Final Status
Diagnostic Workup and Differential Diagnosis				
1	HS should be diagnosed clinically based on 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 three months or more, or those that relapse twice within the last six months, are diagnostic of HS.	Reached Consensus	-	Included In the final Consensus Statements
2	Differential diagnoses such as pilonidal cysts, furuncles, and Crohn's disease should be considered and ruled out based on 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.	Reached Consensus	-	Included In the final Consensus Statements
3	Due to the characteristic phenotypes in the UAE, follicular occlusion patterns, including follicular triad and tetrad, should be assessed as part of the differential diagnosis.	Reached Consensus	-	Included In the final Consensus Statements
4	Baseline blood tests, including CBC, CRP, and ESR, should be performed to assess systemic inflammation.	Did not reach consensus	Reached consensus after paraphrasing to "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 the severity of inflammation, markers of disease activity,	Included In the final Consensus Statements

			secondary infection, and 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.	Reached Consensus	-	Included In the final Consensus Statements
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.	Reached Consensus	-	Included In the final Consensus Statements
7	Regular monitoring of metabolic parameters, including fasting glucose and lipid profile, is recommended due to the association of HS with metabolic syndrome.	Did not reach consensus	Reached consensus after paraphrasing to “Baseline monitoring of metabolic parameters, including fasting glucose and lipid profile, is recommended due 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.”	Included In the final Consensus Statements
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.	Reached Consensus	-	Included In the final Consensus Statements
9	At the baseline and during the subsequent visits, HS should be assessed for severity and medical treatment response using the	Did not reach consensus	Reached consensus after paraphrasing to “At the baseline and during the	

	IHS4. Additional dynamic scores, such as the HS-PGA and SASH, may be considered.		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.	Reached Consensus	-	Included In the final Consensus Statements
11	Healthcare practitioners should consider that non-inflammatory HS cases may still have an inflammatory component, affecting the treatment decision.	Reached Consensus	-	Included In the final Consensus Statements
Comorbidity Assessment				
12	Patients with suspected HS should be assessed for predisposing factors such as smoking, being overweight, and having a personal or family history of HS, acne, IBD, and rare skin disorders such as steatocystoma multiplex.	Reached Consensus	-	Included In the final Consensus Statements
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.	Reached Consensus	-	Included In the final Consensus Statements
14	Given the high prevalence of diabetes and obesity in the UAE, it is essential to assess all HS patients for these conditions as	Did not reach consensus	Did not reach consensus	Excluded

	part of the initial diagnostic workup. Routine testing of HbA1c testing and fasting glucose levels should be incorporated to screen for diabetes or pre-diabetes in patients with HS.			
Complications Monitoring				
15	Chronic HS can lead to severe complications such as scarring, sinus tract formation, and strictures, which can significantly impact the quality of life. Thus, chronic HS should be frequently monitored for complications assessment.	Reached Consensus	-	Included In the final Consensus Statements
16	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.	Reached Consensus	-	Included In the final Consensus Statements
17	Patients with severe HS should be monitored for renal impairment using microalbuminuria or proteinuria. Renal biopsy should be considered if necessary.	Did not reach consensus	Did not reach consensus	Excluded
18	Patients with HS should undergo routine psychological assessment due to its substantial impact on mental health.	Did not reach consensus	Did not reach consensus	Excluded
Syndromal HS				
19	Recognising syndromal forms of HS, which may present with a combination of dermatological and systemic symptoms, requires a multidisciplinary approach for diagnosis and management.	Reached Consensus	-	Included In the final Consensus Statements
20	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.	Reached Consensus	-	Included In the final Consensus Statements

21	Paediatric syndromal HS, including PASH and PAPASH syndromes, should be identified early for appropriate genetic counselling and management.	Reached Consensus	-	Included In the final Consensus Statements
General Management				
22	HS patients should receive counselling for weight loss, dietary modification, and smoking cessation as needed.	Reached Consensus	-	Included In the final Consensus Statements
23	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 based on the patient's response.	Reached Consensus	-	Included In the final Consensus Statements
Topical and Systemic Antibiotics				
24	Topical clindamycin 1% solution or gel applied twice daily is recommended for mild HS.	Reached Consensus	-	Included In the final Consensus Statements
25	Given their anti-inflammatory properties, oral doxycycline (100 mg BID) is the first-line systemic antibiotic for moderate-to-severe HS.	Reached Consensus	-	Included In the final Consensus Statements
26	For 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.	Reached Consensus	-	Included In the final Consensus Statements
27	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.	Reached Consensus	-	Included In the final Consensus Statements

28	Intravenous clindamycin therapy for five days (3 × 600 mg/d) should be recommended in patients with moderate to severe HS/AI prior to another systemic therapy.	Did not reach consensus	Reached consensus after paraphrasing to “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 based on the clinician's decision and results of bacterial culture and drug sensitivity testing.”	Included In the final Consensus Statements
29	Intravenous ertapenem can be administered as rescue therapy or as bridging therapy prior to surgery. Other antibiotic regimens, such as rifampicin, moxifloxacin, and metronidazole, can be applied based on the clinician's decision and results of bacterial culture and drug sensitivity testing.	Did not reach consensus	Did not reach consensus	Excluded
Intralesional therapy				
30	Intralesional corticosteroid injections (e.g., triamcinolone acetonide) can be used to reduce inflammation and pain in acute nodules and abscesses.	Reached Consensus	-	Included In the final Consensus Statements
Retinoids				
31	Oral retinoid therapy with alitretinoin or acitretin may be considered as an alternative treatment option for moderate-to-severe HS, especially for patients with follicular hyperkeratosis type HS or a history of severe acne.	Did not reach consensus	Reached consensus after paraphrasing to “Oral retinoid therapy may be considered an alternative treatment option for moderate-to-severe HS, especially for patients with follicular	Included In the final Consensus Statements

			hyperkeratosis type of HS or a history of severe acne.”	
32	Retinoids should be avoided in women of childbearing age.	Reached Consensus	-	Included In the final Consensus Statements
Hormonal antiandrogen				
33	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.	Reached Consensus	-	Included In the final Consensus Statements
34	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.	Reached Consensus	-	Included In the final Consensus Statements
35	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.	Reached Consensus	-	Included In the final Consensus Statements
36	Metformin should be considered as an alternative adjunct treatment option, particularly given the association between HS and metabolic disorders.	Reached Consensus	-	Included In the final Consensus Statements
Other immunosuppressive and immunomodulatory agents				
37	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.	Reached Consensus	-	Included In the final Consensus Statements
Biologics for Management of HS				

38	Biological therapy is recommended for adult patients with moderate-to-severe HS who have an inadequate response to systemic HS therapies.	Reached Consensus	-	Included In the final Consensus Statements
39	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.	Reached Consensus	-	Included In the final Consensus Statements
40	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.	Reached Consensus	-	Included In the final Consensus Statements
41	Transient dose intensification of Adalimumab in patients with moderate to severe HS and partial response or reduction of response to Adalimumab over time may be considered.	Did not reach consensus	Reached consensus after paraphrasing to “Transient dose intensification of adalimumab may be considered in: - Patients with partial response. - Patients with a reduction of response to adalimumab over time.”	Included In the final Consensus Statements
42	Off-label use of adalimumab may be considered in pediatric cases; large-scale trials specific to pediatric patients with HS are needed to confirm these findings.	Reached Consensus	-	Included In the final Consensus Statements
43	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	Reached Consensus	-	Included In the final Consensus Statements

	povorcitinib) pathway inhibition can be considered after failure of or intolerance to recommended biologic treatment.			
Surgical Interventions				
44	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.	Reached Consensus	-	Included In the final Consensus Statements
45	Deroofing is recommended for superficial tunnels.	Reached Consensus	-	Included In the final Consensus Statements
46	Lesional excision is recommended for recurrent nodules, abscesses, and sinus tracts (tunnels) in mild-to-moderate HS.	Reached Consensus	-	Included In the final Consensus Statements
47	In eligible patients, complete local or regional excision is a recommended treatment option for patients with moderate-to-severe HS.	Reached Consensus	-	Included In the final Consensus Statements
48	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.	Reached Consensus	-	Included In the final Consensus Statements
49	Skin grafting or flap procedures should be considered for extensive defects.	Reached Consensus	-	Included In the final Consensus Statements
LASER treatment				
50	CO2 ablative laser therapy is a treatment option for mild-to-moderate HS.	Reached Consensus	-	Included In the final Consensus Statements

51	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.	Reached Consensus	-	Included In the final Consensus Statements
Pain therapy				
52	Pain management should involve a multidisciplinary team, including dermatologists, pain specialists, and primary care providers, to create a comprehensive pain management plan.	Reached Consensus	-	Included In the final Consensus Statements
Psychological therapy				
53	Referral to mental health professionals, including psychologists and psychiatrists, should be considered for patients showing signs of significant psychological distress.	Reached Consensus	-	Included In the final Consensus Statements
Management of Complications				
54	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.	Reached Consensus	-	Included In the final Consensus Statements
55	Systemic antibiotics and biologic therapies should be tailored to manage both the primary disease and prevent secondary infections or complications in HS patients.	Reached Consensus	-	Included In the final Consensus Statements
Diagnostic Delay				
56	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.	Reached Consensus	-	Included In the final Consensus Statements

	- 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				
57	There is a lack of evidence on the optimal duration of treatment for HS. Research is needed to define the window of opportunity based on 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.	Reached Consensus	-	Included In the final Consensus Statements
58	Clear criteria for when to shift medications are lacking. Criteria should be developed to guide clinicians on when to consider changing medications based on factors such as inadequate response, side effects, and changes in disease severity.	Reached Consensus	-	Included In the final Consensus Statements
59	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 obese patients.	Reached Consensus	-	Included In the final Consensus Statements

60	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.	Reached Consensus	-	Included In the final Consensus Statements
61	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.	Reached Consensus	-	Included In the final Consensus Statements
62	The importance of administering vaccines to HS patients, 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.	Reached Consensus	-	Included In the final Consensus Statements

AI, acne inversa. **BID**, twice daily. **CBC**, complete blood count. **CO₂**, carbon dioxide. **CRP**, C-reactive protein. **DLQI**, Dermatology Life Quality Index. **ESR**, erythrocyte sedimentation rate. **HbA1c**, glycated hemoglobin. **HiSCR / HiSCR50**, Hidradenitis Suppurativa Clinical Response ($\geq 50\%$ reduction in abscess and inflammatory nodule count, with no increase in abscesses and no increase in draining fistulas/tunnels vs baseline). **HS**, hidradenitis suppurativa. **HS-PGA**, Hidradenitis Suppurativa Physician's Global Assessment. **IBD**, inflammatory bowel disease. **IHS4**, International Hidradenitis Suppurativa Severity Score System. **IL-1 / IL-17 / IL-12p40 / IL-23**, interleukin-1 / interleukin-17 / interleukin-12 p40 subunit / interleukin-23. **IPL**, intense pulsed light. **JAK**, Janus kinase. **MRI**, magnetic resonance imaging. **Nd:YAG**, neodymium-doped yttrium aluminum garnet (laser). **PASH**, pyoderma gangrenosum, acne, and suppurative hidradenitis. **PAPASH**, pyogenic arthritis, pyoderma gangrenosum, acne, and suppurative hidradenitis. **PCOS**, polycystic ovary syndrome. **PROMs**, patient-reported outcome measures. **SAPHO**, synovitis, acne, pustulosis, hyperostosis, and osteitis. **SASH**, Severity and Area Score for Hidradenitis. **SCC**, squamous cell carcinoma. **TNF- α** , tumor necrosis factor-alpha. **UAE**, United Arab Emirates. **US**, ultrasound.