



Hidradenitis Suppurativa (HS) in Special Patient Population

Masoud Mardani  ^{1,*}

¹ Infectious Diseases and Tropical Medicine Research Center, Shahid Beheshti University of Medical Sciences, Tehran, Iran

***Corresponding Author:** Infectious Diseases and Tropical Medicine Research Center, Shahid Beheshti University of Medical Sciences, Tehran, Iran. Email: drmasoudmardani@yahoo.com

Received: 2 September, 2025; **Accepted:** 2 September, 2025

Keywords: Pregnancy, Special Patients, Breast Feeding, Hidradenitis Suppurativa, Malignancy

Hidradenitis suppurativa (HS) is a chronic, relapsing, and debilitating inflammatory skin disorder characterized by the formation of recurrent nodules, abscesses, sinus tracts, and scarring. The disease primarily involves the folliculopilosebaceous unit in apocrine gland-bearing intertriginous areas, including the axillae, inguinal and anogenital regions, buttocks, and inframammary folds. Less frequently, lesions may occur on the posterior neck, inner thighs, and waistband areas (1). The global prevalence of HS is estimated at approximately 1%, with a female predominance. Onset typically occurs after puberty, most commonly during the second and third decades of life, suggesting a potential hormonal influence. The HS has been associated with other dermatological conditions such as acne vulgaris, pilonidal sinus, and hirsutism (1).

Clinically, HS begins with comedones, painful inflammatory nodules, and abscesses, which may rupture and discharge purulent material. Recurrent inflammation often results in the development of interconnected sinus tracts and extensive dermal fibrosis, contributing to chronicity and disfigurement. Secondary bacterial infection is common and may necessitate systemic antibiotic therapy. The disease course is variable, ranging from mild, localized involvement to severe, widespread, and mutilating forms (2).

The exact pathogenesis of HS remains incompletely understood; however, follicular occlusion, dysregulated immune responses, genetic predisposition, and microbial factors are implicated. Modifiable risk factors such as cigarette smoking and obesity are strongly correlated with both disease onset and progression, and are considered to worsen clinical severity (2).

These three statements represent only a subset of the 119 consensus recommendations outlined in the “North American Clinical Practice Guidelines for the Medical Management of HS in Special Patient Populations”, published in the Journal of the American Academy of Dermatology. This inaugural guideline provides expert-endorsed recommendations for the medical management of HS across seven clinically distinct populations: Pregnant and lactating patients, pediatric patients, individuals with malignancy, patients with tuberculosis (TB) infection, those with hepatitis B or C, and persons living with HIV (3).

Among the 27 recommendations for patients with HS who are pregnant or planning pregnancy, the authors designated 8 as “strong” based on the quality of the supporting evidence, with the remaining recommendations rated as “conditional”. The strong recommendations encompass: Administration of zinc supplementation, avoiding oral doxycycline due to potential teratogenic risk, avoiding oral erythromycin because of the risk of hepatotoxicity and other adverse outcomes, use of metformin, continuation of biologic therapy, preferential use of adalimumab in patients requiring biologics, and limiting doxycycline in breastfeeding patients (3). Recommendations for other HS patient subgroups include the following.

Consensus Recommendations for Hidradenitis Suppurativa in Special Populations

The North American Clinical Practice Guidelines for the Medical Management of HS in Special Patient Populations provide a structured framework for managing HS in patients with unique clinical considerations. Across eight populations – pregnancy, breastfeeding, pediatrics, malignancy, TB infection, hepatitis B or C, and HIV – treatment recommendations

are graded as “strong” or “conditional” depending on the strength of available evidence and clinical consensus.

- Strong recommendations indicate high-quality evidence and high confidence in the balance of benefits and risks.

- Conditional recommendations reflect situations where evidence is limited, benefits and risks may vary, or individualized clinical judgment is required.

The guidelines emphasize safety, disease control, and coordination with specialists (e.g., oncologists, hepatologists, infectious disease experts) when systemic therapies, biologics, or immunomodulators are indicated. Special considerations include teratogenicity, lactation safety, pediatric dosing, infection risk, and prior malignancy history (3). This information is summarized in **Table 1**. The table summarizes the strength of evidence-based recommendations for HS treatment across eight clinically distinct populations, including pregnancy, breastfeeding, pediatrics, malignancy, TB infection, hepatitis B or C, and HIV. Strong recommendations reflect high-quality evidence with a clear benefit-risk balance, while conditional recommendations indicate areas where evidence is limited or clinical judgment is required. The guidance emphasizes safety, individualized treatment, and coordination with relevant specialists (e.g., obstetricians, oncologists, hepatologists, and infectious disease experts) when systemic therapies, immunomodulators, or biologics are indicated.

Table 1. Consensus Recommendations for the Medical Management of Hidradenitis Suppurativa in Special Patient Populations

Patient Population; Therapy	Recommendation Strength	Key Considerations
Pregnancy/planning pregnancy		
Zinc supplementation	Strong	Evidence supports safety and benefit.
Avoid oral doxycycline	Strong	Risk of congenital anomalies
Avoid oral erythromycin	Strong	Risk of hepatotoxicity and other adverse outcomes
Metformin	Strong	Safe in pregnancy for HS management
Continuation of biologics	Strong	Maintaining disease control
Adalimumab for biologics	Strong	Preferred biologic when treatment needed
Limit doxycycline in breastfeeding	Strong	Reducing exposure to infant
Breastfeeding		
Oral rifampin (systemic antibiotics)	Conditional	Using only if systemic therapy required
Pediatrics		
Antiseptic washes with topical therapy	Conditional	Reducing bacterial resistance
Adolescent females: Spironolactone or combined oral contraceptives	Conditional	Considering developmental stage and safety
Biologics: Adalimumab ≥ 12 years	Strong	FDA-approved age group, effective in HS
Malignancy		
Oral doxycycline (systemic antibiotics)	Strong	Safe for HS management post-cancer
Metformin (antiandrogens)	Strong	Preferred antiandrogen therapy
Systemic immunomodulators/biologics	Strong	Coordinating with oncologist, considering HS activity, prior cancer type/stage, prognosis, and immunosuppressive risk
TB infection		
Rifampin 4-month course (latent TB)	Strong	Standard latent TB therapy
Antiandrogens: Metformin	Strong	Safe in high-risk TB patients
Glucocorticoids (> 15 mg prednisone eq.)	Strong	Annual latent TB screening recommended
Hepatitis B or C		
Ciprofloxacin (systemic antibiotics, especially with cirrhosis)	Conditional	Adjustment for liver function
Antiandrogens (non-cirrhotic)	Strong	Using similar approach as general HS population
Systemic immunomodulators/biologics	Strong	Screening for hepatitis B/C prior to initiation
HIV		
Oral doxycycline (systemic antibiotics)	Conditional	Safe choice in HIV patients
Antiandrogens	Conditional	Considering non-metformin antiandrogens; following general HS protocols
Systemic immunomodulators/biologics	Strong	HIV screening required prior to therapy

Abbreviations: HS, hidradenitis suppurativa; TB, tuberculosis.

To sum up, the guidelines emphasize three key take-home messages:

1. Biologics can be safely administered for the treatment of HS during pregnancy and breastfeeding,

2. Biologic therapy is safe and effective for pediatric and adolescent patients with HS.

3. Patients with HS who have concurrent chronic infections can undergo HS treatment safely, provided there is careful collaboration with infectious disease specialists and other relevant clinicians.

Acknowledgements

We would like to thank Dr. Bita Pourkaveh for her contribution to collecting data and editing the manuscript.

Footnotes

Authors' Contribution: M. M. is the only author of the article and the study was solely carried out by the author.

Conflict of interest: The author declares no conflict of interest.

Funding/Support: The author declares there is no funding or support.

References

1. Goldburg SR, Strober BE, Payette MJ. Hidradenitis suppurativa: Epidemiology, clinical presentation, and pathogenesis. *J Am Acad Dermatol.* 2020;82(5):1045-58. [PubMed ID: 31604104]. <https://doi.org/10.1016/j.jaad.2019.08.090>.
2. Jenkins T, Isaac J, Edwards A, Okoye GA. Hidradenitis Suppurativa. *Dermatol Clin.* 2023;41(3):471-9. [PubMed ID: 37236715]. <https://doi.org/10.1016/j.det.2023.02.001>.
3. Alhusayen R, Dienes S, Lam M, Alavi A, Alikhan A, Aleshin M, et al. North American clinical practice guidelines for the medical management of hidradenitis suppurativa in special patient populations. *J Am Acad Dermatol.* 2025;92(4):825-52. [PubMed ID: 39725212]. <https://doi.org/10.1016/j.jaad.2024.11.071>.