

# Hidradenitis Suppurativa



Staging

Hurley Stage I

Hurley Stage II

Hurley Stage III

Presentation

Transient non-scarring inflammatory lesions.

Separate lesions consisting of recurrent abscesses with tunnel formation and scarring, and single or multiple lesions separated by unaffected skin.

Coalescent lesions with tunnel formation, scarring, and inflammation.

Location

Intertriginous areas and apocrine-gland bearing regions of the skin: axillae, inframammary folds, groin, perigenital, perineal.

Comorbidities

- **Integumentary disease:** Acne, dissecting cellulitis of the scalp, pilonidal disease, pyoderma gangrenosum, and herpes zoster
- **Mood disorder and suicidality:** Depression, generalized anxiety disorder, and suicide
- **Substance use:** Tobacco smoking and substance use disorder
- **Endocrine disease:** Polycystic ovary syndrome
- **Metabolic disease:** Obesity, dyslipidemia, diabetes mellitus, metabolic syndrome
- **Cardiovascular disease:** Hypertension, major adverse cardiovascular events
- **Gastrointestinal disease:** Inflammatory bowel disease
- **Musculoskeletal disease:** Spondyloarthritis
- **Urogynecologic disease:** Sexual dysfunction
- **Genetic disorders:** Trisomy 21 (Down's syndrome)

Onset

- **Mean age of onset:** 21.8 years.
- **Bimodal peak of onset:** mid-teens and mid-40s.
- Earlier median age of onset reported for female patients.

# Hidradenitis Suppurativa Continued

## Causes

- **Dysregulated immunity:** Immune-mediated inflammation of hair follicles in intertriginous areas. The IL-23/TH17 pathway and associated pro-inflammatory cytokines are suggested to be involved.
- **Other:** Bacterial infections, genetic predisposition, and life-style factors (such as smoking and obesity) may contribute to pathogenesis.

## Treatments

- North American clinical management guidelines for HS:
  - **Topical and intralesional therapies:** clindamycin, zinc pyrithione, chlorhexidine, resorcinol, triamcinolone, benzoyl peroxide, dapson
  - **Systemic antibiotics:** tetracyclines, rifampin + clindamycin, rifampin + moxifloxacin + metronidazole, dapson, ertapenem
  - **Hormonal therapies:** antiandrogen contraceptives, metformin, finasteride
  - **Retinoids:** isotretinoin, acitretin, alitretinoin
  - **Systemic immunomodulators:** methotrexate, azathioprine, colchicine, cyclosporine, steroids
  - **Biologics:** adalimumab, infliximab, anakinra, ustekinumab, etanercept, golimumab
- The ONLY approved medication in North America for HS is adalimumab (HUMIRA®), for the treatment of adults with active moderate to severe HS, who have not responded to conventional therapy (including systemic antibiotics).

## References

1. Garg, A., Malviya, N., Strunk, A., Wright, S., Alavi, A., Alhusayen, R., Alikhan, A., Daveluy, S. D., Delorme, I., Goldfarb, N., Gulliver, W., Hamzavi, I., Jaleel, T., Kimball, A. B., Kirby, J. S., Kirchhof, M. G., Lester, J., Lev-Tov, H., Lowes, M. A., Micheletti, R., ... Naik, H. B. (2022). Comorbidity screening in hidradenitis suppurativa: Evidence-based recommendations from the US and Canadian Hidradenitis Suppurativa Foundations. *Journal of the American Academy of Dermatology*, 86(5), 1092–1101. <https://doi.org/10.1016/j.jaad.2021.01.059>
2. Gupta, A. K., & Studholme, C. (2016). Adalimumab (Humira) for the Treatment of Hidradenitis Suppurativa. *Skin therapy letter*, 21(4), 1–4.
3. Naik, H. B., Paul, M., Cohen, S. R., Alavi, A., Suàrez-Fariñas, M., & Lowes, M. A. (2019). Distribution of Self-reported Hidradenitis Suppurativa Age at Onset. *JAMA dermatology*, 155(8), 971–973. <https://doi.org/10.1001/jamadermatol.2019.0478>
4. Saunte, D. M. L., & Jemec, G. B. E. (2017). Hidradenitis Suppurativa: Advances in Diagnosis and Treatment. *JAMA*, 318(20), 2019–2032. <https://doi.org/10.1001/jama.2017.16691>
5. Vinkel, C., & Thomsen, S. F. (2018). Hidradenitis Suppurativa: Causes, Features, and Current Treatments. *The Journal of clinical and aesthetic dermatology*, 11(10), 17–23.
6. von der Werth, J. M., & Williams, H. C. (2000). The natural history of hidradenitis suppurativa. *Journal of the European Academy of Dermatology and Venereology : JEADV*, 14(5), 389–392. <https://doi.org/10.1046/j.1468-3083.2000.00087.x>

## Image Citations

1. Saunte, D. M. L., & Jemec, G. B. E. (2017). Hidradenitis Suppurativa: Advances in Diagnosis and Treatment. *JAMA*, 318(20), 2019–2032. <https://doi.org/10.1001/jama.2017.16691>