

# Hidradenitis Suppurativa Surgery

Clinical Policy ID: CCP.1231

Recent review date: 3/2026

Next review date: 7/2027

Policy contains: Hidradenitis suppurativa; Hurley staging system; skin conditions; acne inversus.

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## Coverage policy

Surgery for hidradenitis suppurativa is clinically proven and, therefore, may be medically necessary when all of the following criteria are met (Alikhan, 2019; Gulliver, 2016; Zouboulis, 2015):

- Member has a confirmed diagnosis of hidradenitis suppurativa from a dermatologist.
- Member exhibits moderate-to-severe disease (typically Hurley stage II or III).
- Disease is refractory to antibiotic treatments, acne washes and medicine, and bleach baths of five to ten minutes.
- Disease is refractory to conservative medical therapy, including, but not limited to:
  - Local consistent hygiene practices.
  - Use of antiseptic and antiperspirant agents (e.g., 6.25% aluminum chloride hexahydrate in absolute ethanol).
  - Application of warm compresses with sodium chloride solution or Burow's solution.
  - Cessation of cigarette smoking.
  - Medications: oral and topical antibiotics, anti-inflammatories, antiandrogens and other hormones, retinoids, biologics, corticosteroids, intralesional triamcinolone, spironolactone, or finasteride.
  - Weight reduction in obese patients.
  - Wearing of loose-fitting clothing.
  - Laser hair removal.

## Limitations

No limitations were identified during the writing of this policy.

## Alternative covered services

- Primary care services (i.e., patient education).
- Specialty services (i.e., dermatological service).

## **Background**

Hidradenitis suppurativa is a chronic inflammatory skin disease causing painful, malodorous nodules and abscesses that form scar tissue and sinus tunnels and tracts with a devastating impact on the member's quality of life. It contributes to chronic pain, depression, body image issues, substance use disorders and an increase in suicidal rates as compared to the general public. Locations of the lesions are generally in the axillae and groin fold areas mostly, but can occur in other areas. A diagnosis is made when the condition occurs at least twice in a six month time frame (Orenstein, 2020).

Hidradenitis suppurativa affects up to 4% of the population worldwide (Marvel, 2019). In a study of 47,690 U.S. patients, hidradenitis suppurativa was more than twice as prevalent among females than males (137 versus 58 per 100,000), was about three times more prevalent among African Americans than whites (296 versus 95 per 100,000); and was most prevalent among those in their 30s (172 per 100,000) (Garg, 2017). An average delay time of seven years in diagnosis is due to the early stages of this disease being mistaken for other conditions (Ballard, 2024). Medicaid beneficiaries experience a particularly high co-morbidity burden as well as expensive and interrupted use of outpatient healthcare resources that may be associated with poorer outcomes (Marvel, 2019).

Onset at the time of puberty has led several authorities to cite hormonal changes (occlusion of the apocrine duct by a keratinous plug, and defects of the follicular epithelium) as an etiologic factor in the development of hidradenitis suppurativa. An estimated 30% to 40% of persons with the disease report a family history. Comorbidities include obesity, diabetes, insulin resistance, glucose tolerance, and hyperlipidemia (Ballard, 2024; Scuderi, 2017).

The oldest, and simplest, system for classification of hidradenitis suppurativa is the Hurley staging system (Scuderi, 2017). Hurley stage I is a single lesion without sinus tract formation. Stage II manifests as more than one lesion or area, but with limited tunneling. Stage III is defined as multiple lesions, with more extensive sinus tracts and scarring.

Hidradenitis suppurativa is difficult to treat due to the pervasive inflammation with abscesses and inflammatory nodules, which leads to disruption of normal skin and subcutaneous architecture with sinus tract formation and, in severe cases, with extensive scarring. Treatment varies based on presentation and severity of symptoms. It can include systemic and topical antibiotics, acne washes/medicines, hormonal therapy, analgesics, immunosuppressant therapy, and surgical intervention (Ballard, 2024). Surgery is considered the standard of care for recurrent hidradenitis suppurativa (Claessens, 2022).

Surgical excision goal is complete eradication of involved skin and subcutaneous tissues, and avert any possibility of malignant change (i.e., squamous carcinoma); however, controversy surrounds the best procedural approach. Moderately severe axillary lesions can be treated adequately by excision and primary closure. This approach is particularly popular because it allows both axillae to be treated simultaneously in the many patients with bilateral involvement. In the acute phase, surgical intervention should be limited to incision, drainage, and deroofting of the affected area for palliation, and more extensive surgery should be reserved for the silent chronic phase. Reconstruction after radical excision may be indicated to maintain function, reduce contracture deformity,

and provide good aesthetic outcomes (Scuderi, 2017).

## Findings

Surgery is a widely accepted therapeutic option for hidradenitis suppurativa that is refractory to medical treatment. Surgery can be performed at all disease stages alone or combined with other treatments. No consensus exists on the optimal surgical strategy, as rigorous evidence is unavailable for most interventions. Therefore, an individualized approach is needed that takes into consideration disease severity and extension, recurrence rate, body region, presence of comorbidities, history of previous surgery, and patient expectations and preferences.

### Guidelines

Based on the European Dermatology Forum guidelines (Gulliver, 2016) for the management of hidradenitis suppurativa, all patients should be offered adjuvant therapy as needed (pain management, weight loss, tobacco cessation, treatment of super-infections, and application of appropriate dressings). The treating physician should be familiar with disease severity scores, especially Hurley staging. The need for surgical intervention should be assessed in patients with higher Hurley stages of disease. Depending upon the type and extent of scarring, surgical procedures such as derroofing, laser, local excision, or wide excision may be indicated.

A European guideline recommends that hidradenitis suppurativa be treated based on the subjective impact and objective severity of the disease. Locally recurring lesions can be treated by classical surgery or laser techniques; for widely spread lesions, medical treatment either as monotherapy or in combination with radical surgery is more appropriate. Ultimately, the type of surgery and margins are selected based on the body region and severity of the disease (Zouboulis, 2015).

The North American clinical management guidelines for hidradenitis suppurativa, developed by the United States and Canadian Hidradenitis Suppurativa Foundations, recommend that patients with moderate-to-severe disease, typically defined as Hurley stage II or III, complete a trial of conservative medical therapy for at least 12 weeks before considering surgery. When procedures are indicated, medical therapy may be initiated or continued without interruption, as risk for surgical complications is likely higher from poorly controlled disease than from medications. Surgical intervention is typically reserved for disease that is uncontrolled medically. Choice of procedure vary by chronicity and location and understanding the trade-offs between extent of excision, surgical morbidity, and reducing the risk of future lesions (Alikhan, 2019).

### Evidence review

The evidence for safety and effectiveness of excisional and reconstructive surgical approaches for hidradenitis suppurativa consists of small low-quality studies of considerable variability in study design, small sample sizes, and confounding factors such as disease severity, comorbidities, and operator experience. In refractory cases or poor response to medical therapy, surgery can alleviate lesion-related symptoms, reduce recurrence and new lesion formation, and prevent comorbidity progression.

Wide excision and secondary closure options (e.g., split/skin graft and local/distant flap) are associated with a lower risk of recurrence. However, comparison of procedures based on factors predictive of outcome, complication rates, or recurrence rates is difficult to quantify given the heterogeneity across studies. Lack of measurement instruments for hidradenitis adds further difficulty (Claessens, 2022), although efforts to standardize definitions for hidradenitis suppurativa surgical outcomes are underway (Westerkam, 2025).

Several studies have attempted to identify disease characteristics and demographic factors predictive of hidradenitis suppurativa surgical outcomes. Hurley Stage III disease is associated with more severe complications, but there is no consistent association between the known risk factors for the disease (e.g.

diabetes, body mass index, or smoking) and surgical complications or recurrence rates (Bouazzi, 2020; Shams, 2025; Zhu, 2026). In one study, regression analysis showed White race was significantly associated with lower complication risk ( $P = .039$ ), while prior immunomodulator use increased risk ( $P = .02$ ) (Zhu, 2026).

For patients undergoing any surgical procedure for hidradenitis suppurativa, the overall mean complication rate is 24% and mean recurrence rate is 20.1% (Bouazzi, 2020). In Li's analysis of 32 studies ( $n = 6,922$ ), wide excision was the most frequently reported procedure (24.4%) followed by excision of unspecified type (21.7%), deroofing (3.8%), limited local excision (2.5%), and laser ablation (0.5%). Wide excision reduced recurrence risk by 43% compared to limited local excision, and by 50% compared to incision and drainage. These results are consistent with those of an earlier analysis favoring wide excision. Pooled recurrence rates were lowest for wide excision (8%, 95% confidence interval 2% to 16%) and highest for local excision (34%, 95% confidence interval 24% to 44%) (Riddle, 2021).

Following wide excision, several reconstructive options are available for wound healing. Although primary closure and secondary intention healing are simpler to perform, they are associated with higher recurrence rates. In general, flap repair and skin grafting are associated with the lowest recurrence rates.

In Li's (2025) meta-analysis, wound healing methods included incision and drainage (24.5%), primary closure (19.5%), debridement (15.4%), flaps (6%), secondary intention healing (2.8%), grafting (2.2%), and vacuum-assisted closure (1.0%). Secondary intention healing showed a similar recurrence risk compared to primary closure or split-thickness skin grafting. In Ovadja's (2021) analysis of 125 studies, primary closure had the highest recurrence rate (22.0%), whereas skin graft and fasciocutaneous flaps had the lowest rates (2% each). The affected area below the umbilicus was significantly associated with overall recurrence ( $P = .006$ ).

Another systematic review of 121 studies ( $n = 9,642$ ) and found that reconstructive procedures using tissue flaps significantly lowered recurrence rates compared to direct suturing, with advanced reconstructive techniques including skin grafting and open wound healing yielding superior long-term outcomes and functionality (Cucu, 2025). This corroborates the results from Riddle (2021).

Limited evidence exists for procedural safety and efficacy in pediatric patients. In a systematic review of 23 case reports and case series ( $n = 81$ ), the most studied interventions were negative pressure wound therapy ( $n = 30$ ), surgical excision with skin graft/flap ( $n = 19$ ), and endoscopic electrode or laser treatment ( $n = 11$ ). While positive responses were achieved in some cases, more high-quality randomized controlled trials are needed to guide treatment for pediatric hidradenitis suppurativa (Masson, 2023).

In 2021, we removed six references from the policy and updated the references. No policy changes are warranted.

In 2022, we updated the references. No policy changes are warranted.

In 2024, we updated the references. No policy changes are warranted.

In 2025, we updated the references and added a new guideline (Alikhan, 2019), which warranted a policy change.

In 2026, we updated the references and organized the findings section. No policy changes are warranted.

## References

On February 11, 2026, we searched PubMed and the databases of the Cochrane Library, the U.K. National Health Services Centre for Reviews and Dissemination, the Agency for Healthcare Research and Quality, and the Centers for Medicare & Medicaid Services. Search terms were "hidradenitis suppurativa" (MeSH), "hidradenitis suppurativa," "dermatology," "acne inversa," and "skin surgery." We included the best available

evidence according to established evidence hierarchies (typically systematic reviews, meta-analyses, and full economic analyses, where available) and professional guidelines based on such evidence and clinical expertise.

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## Policy updates

4/2016: initial review date and clinical policy effective date: 7/2016

3/2017: Policy references updated.

2/2018: Policy references updated.

1/2019: Policy references updated.

3/2020: Policy references updated.

3/2021: Policy references updated.

3/2022: Policy references updated.

3/2023: Policy references updated.

3/2024: Policy references updated.

3/2025: Policy references updated.

3/2026: Policy references updated.

## Related codes

Below are the most commonly submitted codes for the service(s)/item(s) subject to this policy CCP.1231. This is not an exhaustive list of codes. Providers are expected to consult the appropriate coding manuals and bill accordingly.

<b>Code</b>	<b>Code description</b>
10060	Incision and drainage of abscess (e.g., carbuncle, suppurative hidradenitis, cutaneous or subcutaneous abscess, cyst, furuncle, or paronychia); simple or single
10061	Incision and drainage of abscess (e.g., carbuncle, suppurative hidradenitis, cutaneous or subcutaneous abscess, cyst, furuncle, or paronychia); complicated or multiple
11450	Excision of skin and subcutaneous tissue for hidradenitis, axillary; with simple or intermediate repair
11451	Excision of skin and subcutaneous tissue for hidradenitis, axillary; with complex repair
11462	Excision of skin and subcutaneous tissue for hidradenitis, inguinal; with simple or intermediate repair
11463	Excision of skin and subcutaneous tissue for hidradenitis, inguinal; with complex repair
11470	Excision of skin and subcutaneous tissue for hidradenitis, perianal, perineal, or umbilical; with simple or intermediate repair
11471	Excision of skin and subcutaneous tissue for hidradenitis, perianal, perineal, or umbilical; with complex repair
17110	Destruction (e.g., laser surgery, electrosurgery, cryosurgery, chemosurgery, surgical curettement), of benign lesions other than skin tags or cutaneous vascular proliferative lesions; up to 14 lesions
17111	Destruction (e.g., laser surgery, electrosurgery, cryosurgery, chemosurgery, surgical curettement), of benign lesions other than skin tags or cutaneous vascular proliferative lesions; 15 or more lesions