Hidradenitis and Follicular Disorders

Richard P. Usatine, MD, FAAFP
Professor of Dermatology and Cutaneous Surgery
Professor of Family Medicine
University of Texas Health San Antonio
Founding Director, University Health System Skin Clinic
San Antonio, TX

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Disclosure

I have no financial interests or relationships to disclose.

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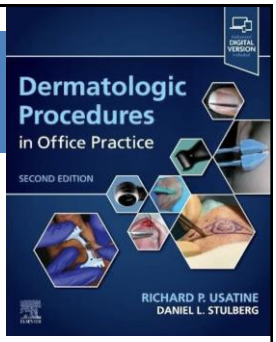
Additional Disclosure



- No conflicts of interest
- Visual Dx, Contributing photographer, Family Medicine Editor
- Author, 12 medical books including:
  - Dermatologic Procedures in Office Practice. 2nd edition. Elsevier, Inc., Philadelphia. 2024.
  - The Color Atlas and Synopsis of Family Medicine. 3nd Edition. McGraw-Hill, New York, 2019
  - The Color Atlas of Internal Medicine, McGraw-Hill, New York, 2015
  - The Color Atlas of Pediatrics, McGraw-Hill, New York, 2014
  - Cutaneous Cryosurgery. 4th Edition. Taylor and Francis, London, 2014
- Co-President, Usatine Media
  - medical app development company
  - *All images in this presentation are copyright Richard Usatine unless otherwise indicated.*

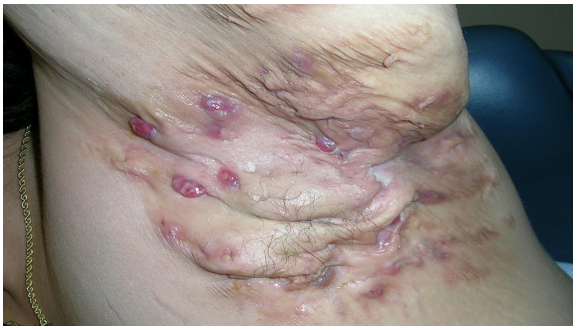
3

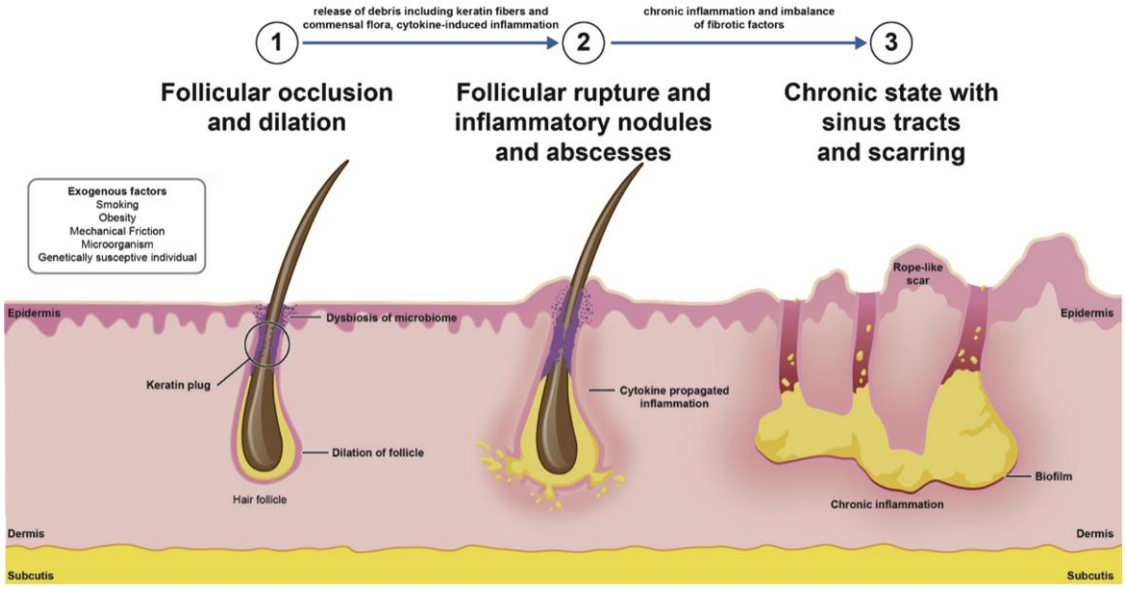
Learning Objectives

- Identify the presenting characteristics and diagnostic findings associated with hidradenitis.
- Develop an initial plan of care for the management of hidradenitis.
- Compare and contrast diagnostic findings of folliculitis, pseudofolliculitis, and keratosis pilaris.

Hidradenitis Suppurativa

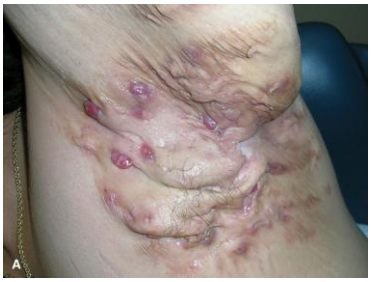
- disease with deep-seated chronic painful nodules, abscesses, and draining sinus tracts (tunnels), which manifests on the apocrine gland-rich skin areas of the body.

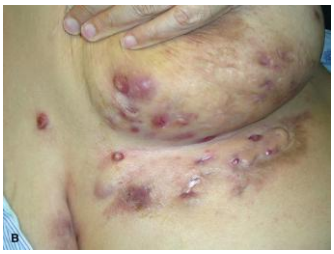


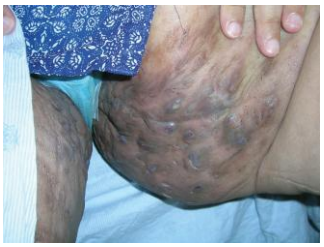


Hidradenitis

- Typical lesions:
  - Nodules
  - Abscesses
  - Draining tunnels
- Typical locations:
  - axilla
  - groin
  - neck
  - under and between the breasts
  - buttocks and perianal







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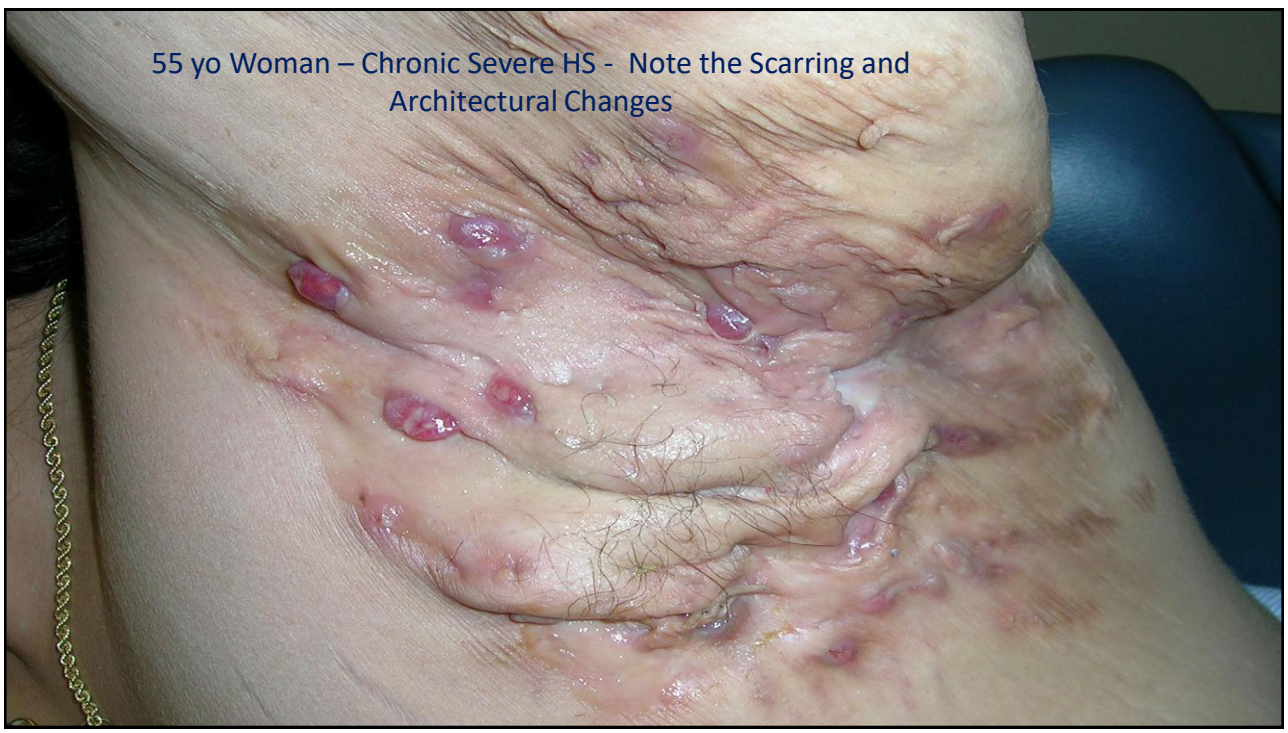

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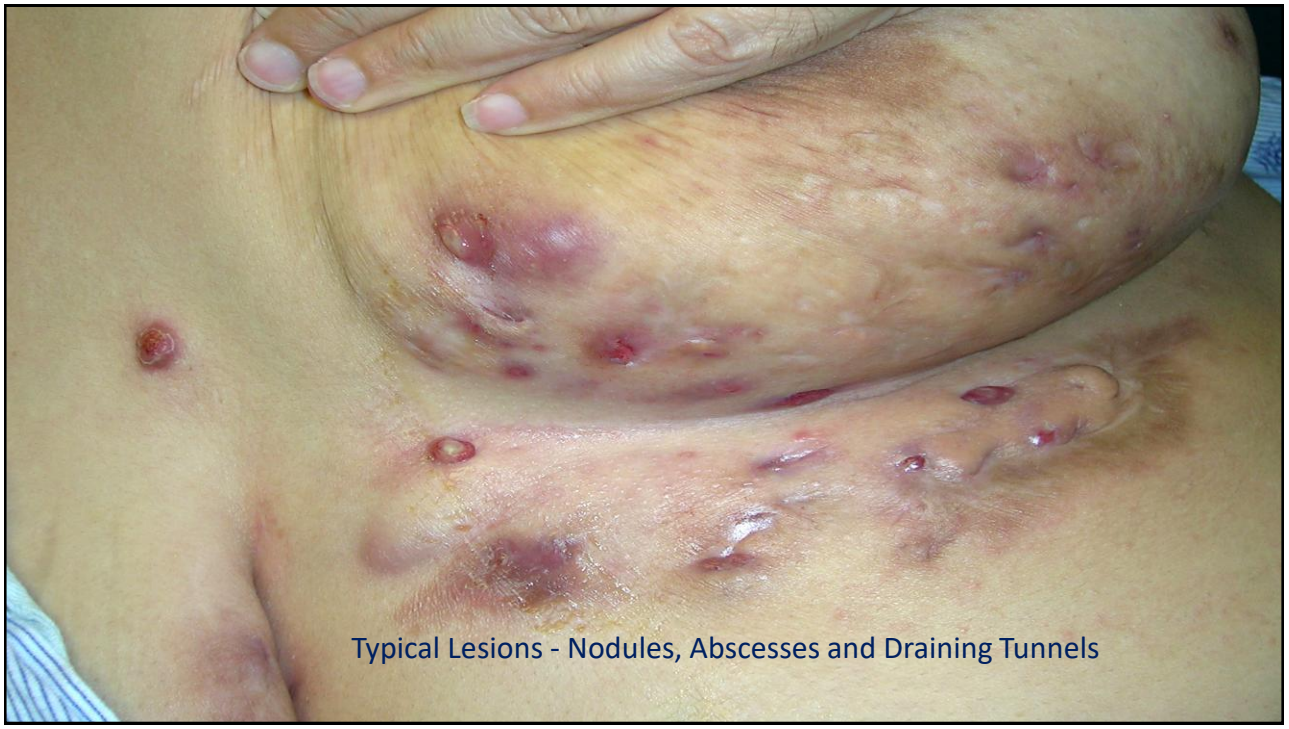

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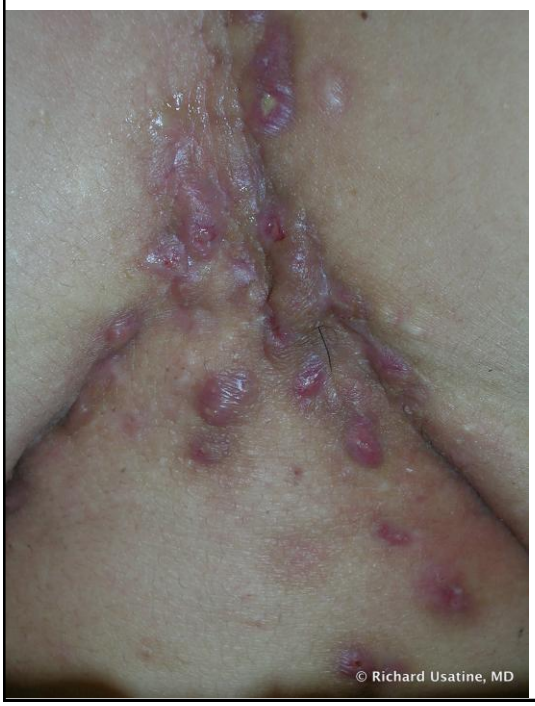
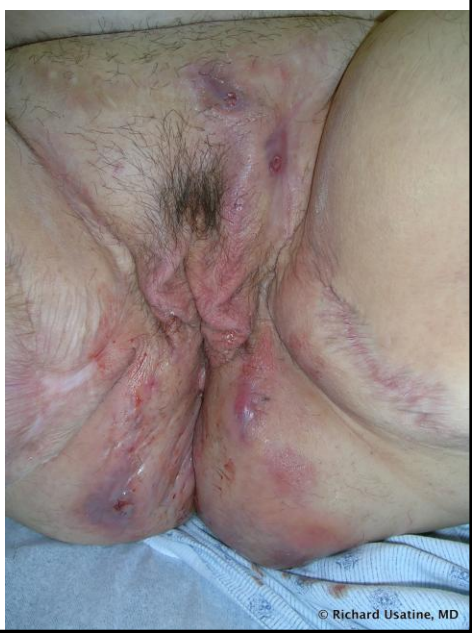
Between Breasts to Involving Groin





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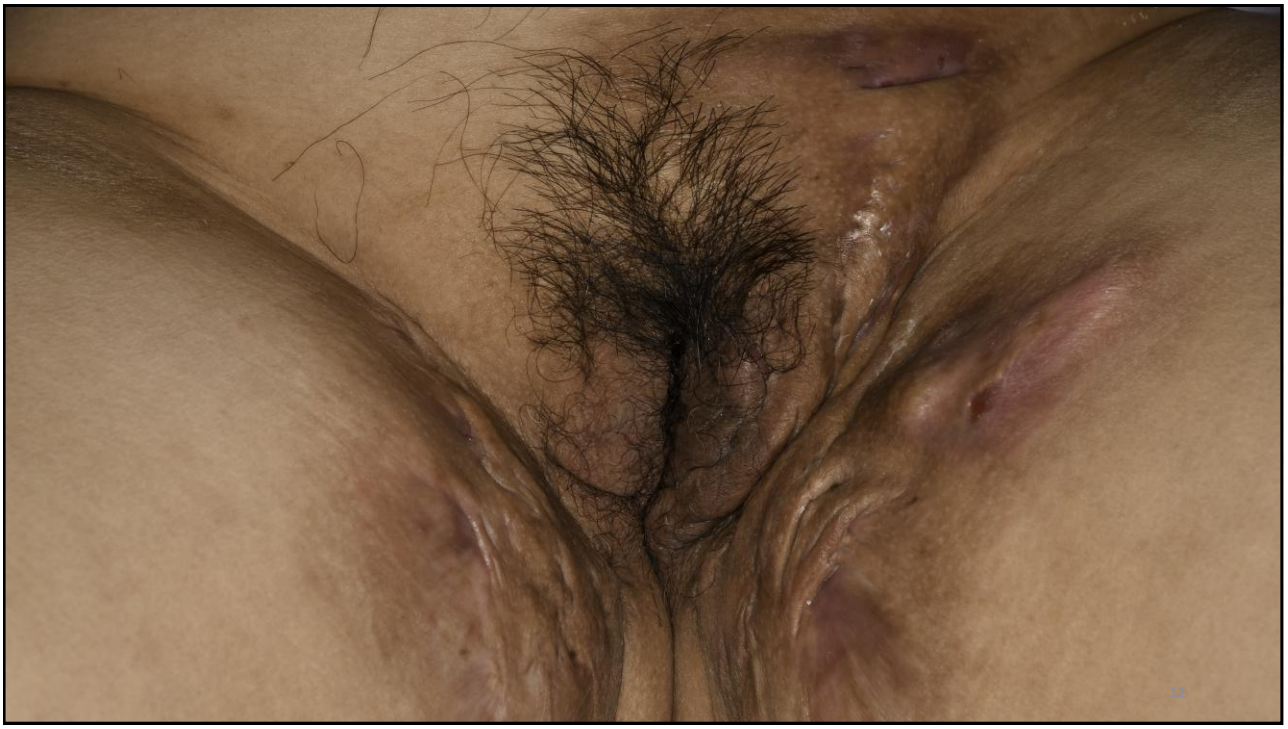

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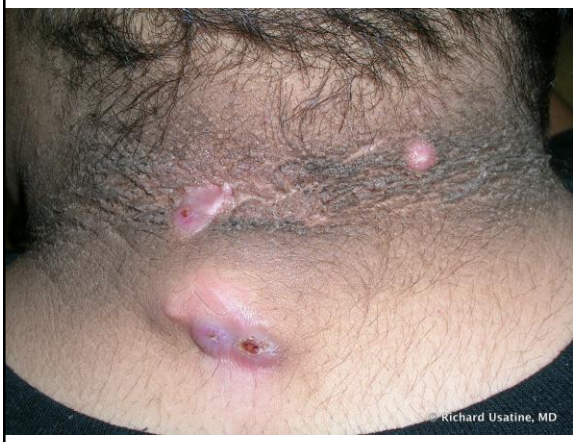
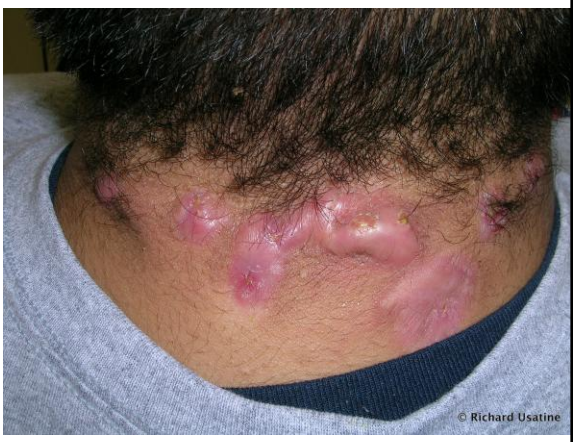
Neck





12

HS Diagnostic Criteria

Presence of all three:

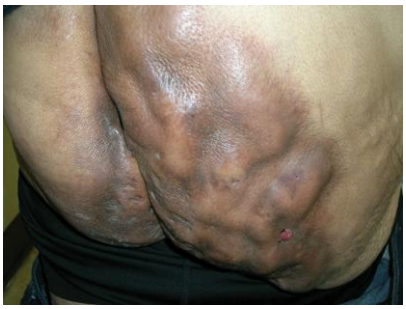
1. Typical lesions
2. Typical locations
3. Recurrence of >= 2 episodes within 6 months

- Zouboulis CC, et al. Hidradenitis Suppurativa/Acne Inversa: Criteria for Diagnosis, Severity Assessment, Classification and Disease Evaluation. Dermatology. 2015;231(2):184-90.

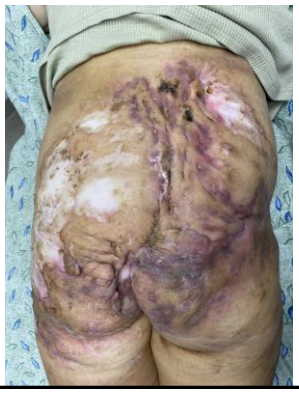
13

Hidradenitis Is Not a Bacterial Infection

- The name hidradenitis suppurativa is correct in that it is suppurative (pus forming), but from inflammation not infection
- The lesions are predominantly inflammatory and not the same as the bacterial infections that cause furuncles, carbuncles, and abscesses
- Therefore, incision and drainage is not typically the treatment of choice



Don't I&D these buttocks with severe hidradenitis



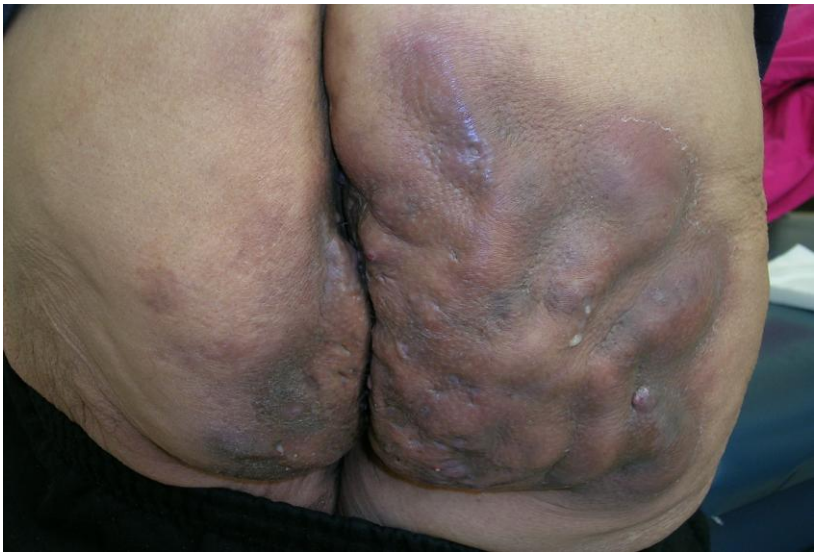
14

Hidradenitis

- Obesity and smoking are risk factors
- Encourage weight loss and smoking cessation
- But do not blame the patient
- This is a devastating disease psychologically and socially
- The patient needs your support short-term and long-term

15

Don’t Underestimate Hidradenitis



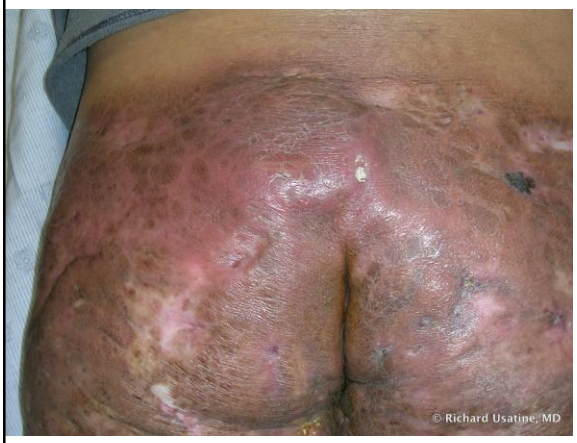
This woman can not sit without pain.

There is a mucopurulent discharge that seeps through clothing.

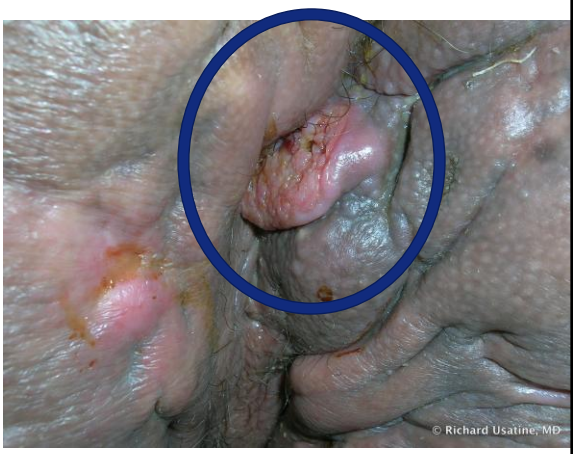
Consider how it can be disabling.

16

HS Can Also Lead to SCC



before



after

17

Epidemiology

- Occurs after puberty in approximately 1% of the population – studies range from 0.05 to 4%.*
- Incidence is higher in females, in the range of 2-3:1.*
- Higher incidence with higher BMI and smoking.*
- In US, African Americans and African descent have the highest rates of HS.*

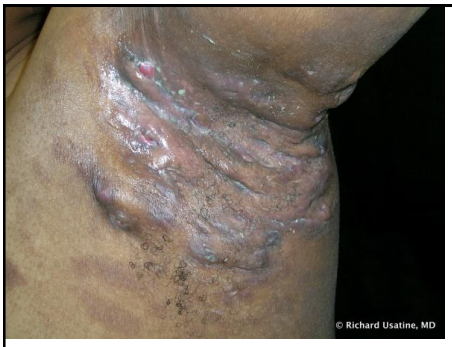
*References:
Shalom G, Cohen AD. The epidemiology of hidradenitis suppurativa: what do we know? Br J Dermatol. 2019 Apr;180(4):712-713.
Theut Riis P, Pedersen OB, Sigsgaard V et al. Prevalence of patients with self-reported hidradenitis suppurativa in a cohort of Danish blood donors: a cross-sectional study. Br J Dermatol 2019; 180:774– 81.
Jemec GB, Kimball AB. Hidradenitis suppurativa: epidemiology and scope of the problem. J Am Acad Dermatol 2015; 73:S4–7
Sachdeva M, Shah M, Alavi A. Race-specific prevalence of hidradenitis suppurativa [published online November 11, 2020]. *J Cutan Med Surg*. 2021;25:177-187.

18

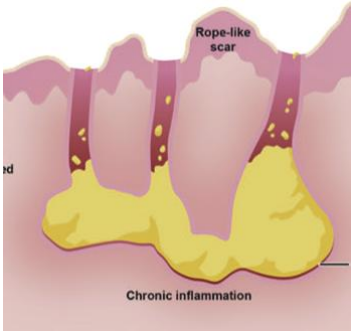
Patient Perspective

- The lesions hurt, drain and may have an odor
- The drainage can get on the clothing, so gauze may be worn under clothing
- Pain and odor can affect function and the ability to work
- It is embarrassing to be in public when there is odor and drainage
- It affects self-image and the ability to be intimate with another person
- Sexual distress is worse for women and single persons.

19



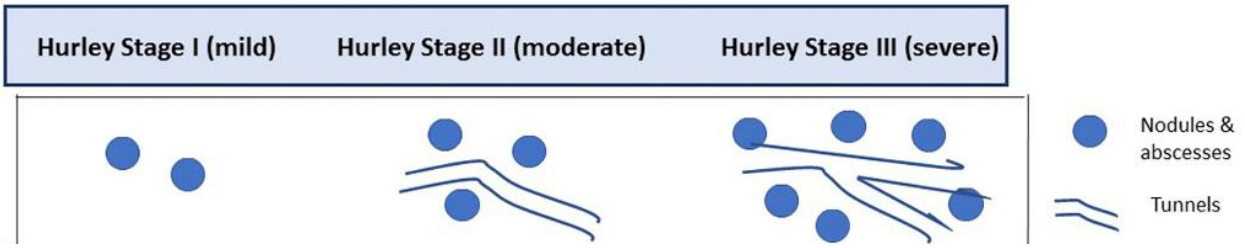
Staging



- Hurley Staging – based on presence of sinus tracts (draining tunnels)
- Modified Hurley Staging – adds number of regions involved
- International Hidradenitis Suppurativa Severity Score System

20

Hurley Stage



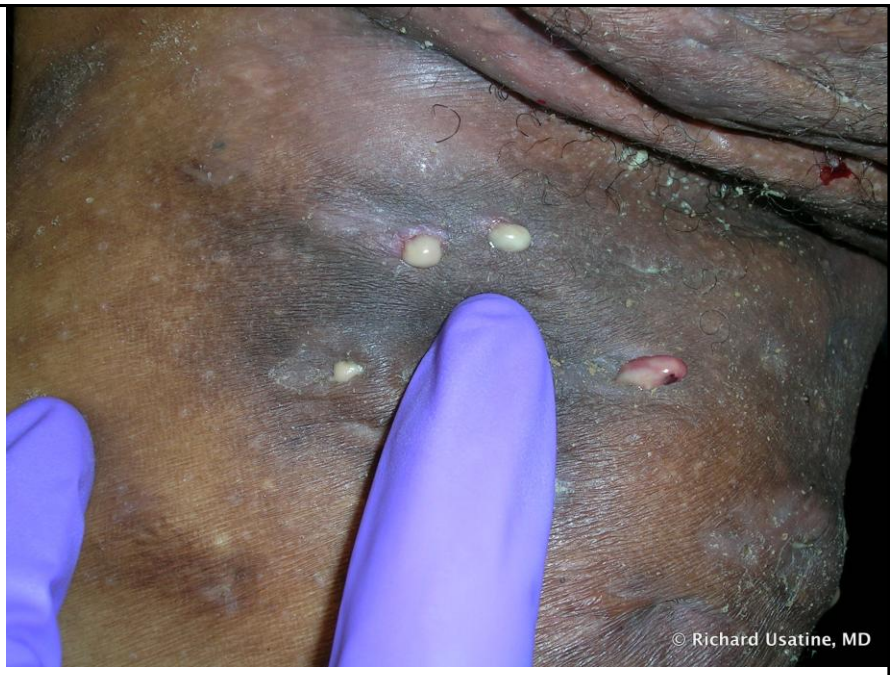
- I is characterized by recurrent nodules and abscesses in typical HS locations with minimal scar
- II is characterized by 1 or a limited number of **draining tunnels** and/or scarring within a body region
- III is characterized by multiple or extensive **draining tunnels** and/or scarring

21

Hurley Stage III

Extensive Draining Tunnels

Single Pressure Point Releasing Pus from 4 Openings



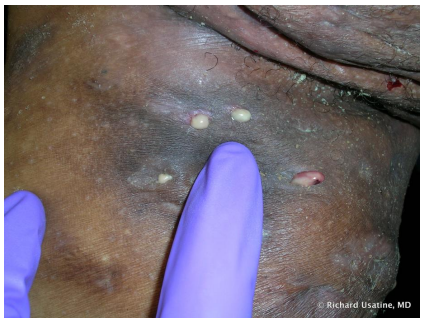
22

International Hidradenitis Suppurativa Severity Score System (IHS4)

- (Nodule count) + (abscess count x 2) + (draining tunnel count x 4)

- Mild 0-3
- Moderate 4-10
- Severe >= 11

- dynamically assess HS severity
- useful in real-life and the clinical trials

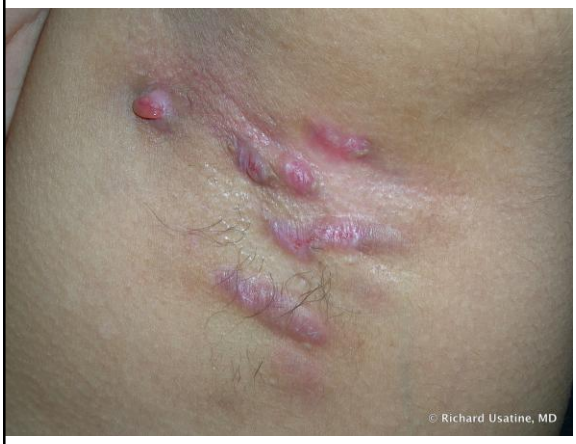


Zouboulis, et al. Development and validation of the International Hidradenitis Suppurativa Severity Score System (IHS4), a novel dynamic scoring system to assess HS severity. *Br J Dermatol*. 2017;177(5):1401-1409.

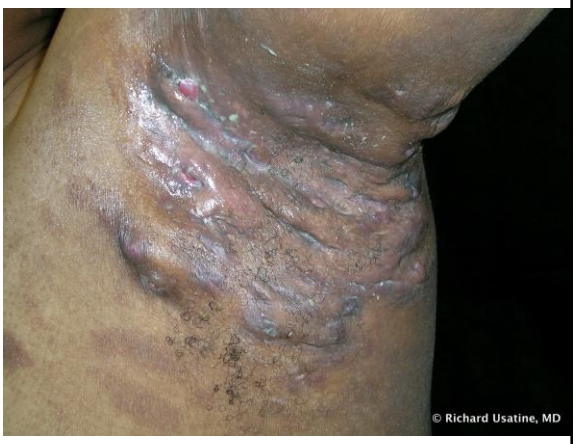
23

Moderate to Severe Axillary Involvement

Nodules and abscesses (4-10)



More abscesses, draining tunnels (>11)



24

Co-morbidities

- COPD
- Metabolic syndrome
- Fatty liver
- Diabetes with complications – cardiovascular, renal, …
- Chronic pain
- Psychiatric – depression, anxiety, suicidal ideation
- SCC in chronic lesions
- Even mild hidradenitis suppurativa impairs quality of life

- Even mild hidradenitis suppurativa impairs quality of life. Br J Dermatol. 2019 Mar 27.
- Nielsen RM, Lindsø Andersen P, Sigsgaard V, Riis PT, Jemec GB. Pain perception in patients with Hidradenitis Suppurativa. Br J Dermatol. 2019 Mar 28

25

Original Article

Hidradenitis Suppurativa, Intimate Partner Violence, and Sexual Assault

Journal of Cutaneous Medicine and Surgery
2017, Vol. 21(5) 383–387

DOI: 10.1177/1203475417708167
journals.sagepub.com/home/jcms

Canadian Dermatology Association / Association canadienne de dermatologie

Mia Sisic[1], Jerry Tan[2], and Kathryn D. Lafreniere[1]

Abstract

Background: Sexual assault and intimate partner violence have never been examined in individuals with hidradenitis suppurativa. The research is important, because prior studies show higher incidences of intimate partner violence and sexual assault in individuals with disabilities, and hidradenitis suppurativa meets criteria for a disability.

Objectives: The objective of the study is to examine whether individuals with hidradenitis suppurativa are at significantly higher risk of intimate partner violence and sexual assault compared with individuals who have acne, a recognised disability.

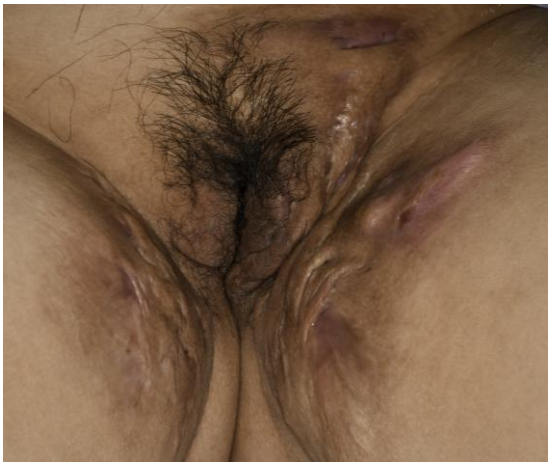
Methods: Participants who met criteria for hidradenitis suppurativa and acne were recruited from a mid-sized university and a dermatology clinic. Participants spoke English and were over the age of sexual consent. Group (hidradenitis suppurativa and acne) differences on intimate partner violence and sexual assault were analysed. Victimisation within the past 12 months was measured using the Checklist for Controlling Behaviours, a measure of intimate partner violence, as well as the Sexual Experiences Survey–Short Form Victim, a measure of sexual assault.

Results: In total, 243 participants (n = 128 for hidradenitis suppurativa; n = 115 for acne) were surveyed. Individuals with hidradenitis suppurativa were significantly more likely to report being victimised by intimate partner violence.

Conclusions: Intimate partner violence was more frequently observed in individuals with hidradenitis suppurativa. Health care providers should be aware of this issue when interacting with patients with hidradenitis suppurativa.

26

Hidradenitis Suppurativa, Intimate Partner Violence, and Sexual Assault



- Intimate partner violence was more frequently observed in individuals with hidradenitis suppurativa.

27

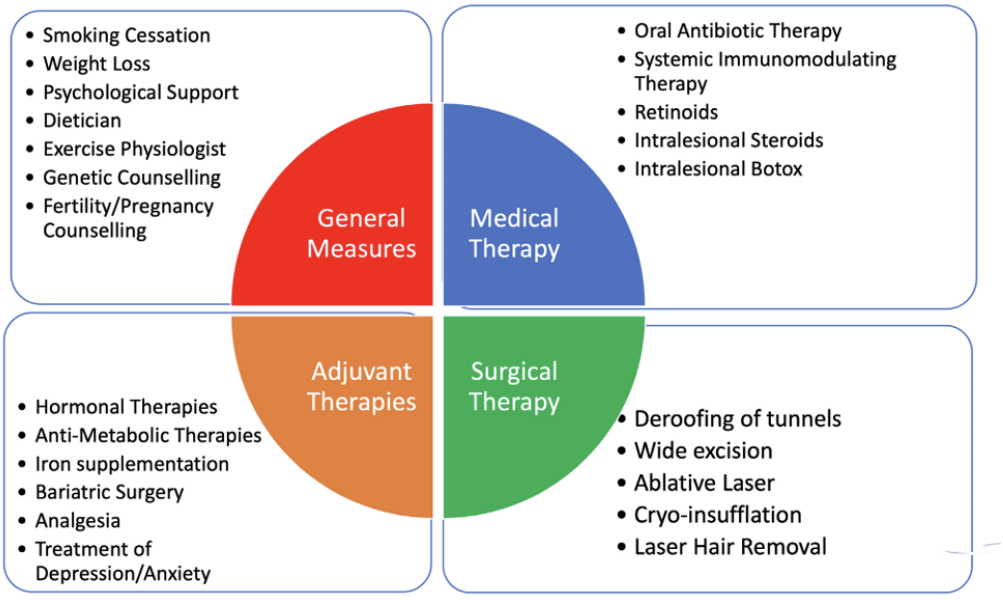
< Previous Article | July 2019 Volume 81, Issue 1, Pages 76–90 | Next Article >

North American clinical management guidelines for hidradenitis suppurativa: A publication from the United States and Canadian Hidradenitis Suppurativa Foundations

Part I: Diagnosis, evaluation, and the use of complementary and procedural management

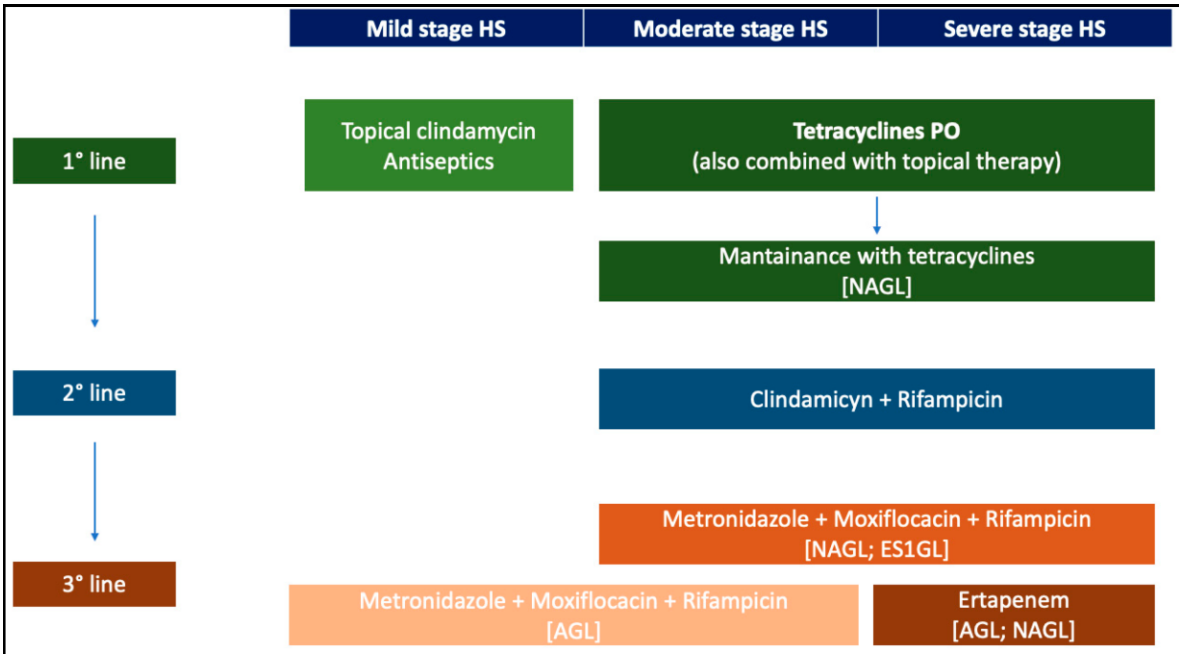
Ali Alikhan, MD (Co-chair)[a], Christopher Sayed, MD (Co-chair)[b,*], Afsaneh Alavi, MD, MSc[c], Raed Alhusayen, MD[c], Alain Brassard, MD[d], Craig Burkhart, MD[b], Karen Crowell, MLIS[e], Daniel B. Eisen, MD[d], Alice B. Gottlieb, MD, PhD[f], Iltefat Hamzavi, MD[g], Paul G. Hazen, MD[h], Tara Jaleel, MD[i], Alexa B. Kimball, MD, MPH[j], Joslyn Kirby, MD, MEd, MS[k], Michelle A. Lowes, MBBS, PhD[l], Robert Micheletti, MD[m,n], Angela Miller, CCRP, CWCA[g], Haley B. Naik, MD, MHSc[o], Dennis Orgill, MD[p], Yves Poulin, MD[q]

28



Australasian hidradenitis suppurativa management guidelines. Australas J Dermatol. 2025;66:75–89. https://doi.org/10.1111/ajd.14388

29



AGL: ALLIANCE HS guidelines; ES1GL: European S1 guidelines; HS: hidradenitis suppurativa; NAGL: North American guidelines; PO: per os.

Molinelli E, Systemic Antibiotic Therapy in Hidradenitis Suppurativa: A Review on Treatment Landscape and Current Issues. Antibiotics (Basel). 2023 May 29;12(6):978.

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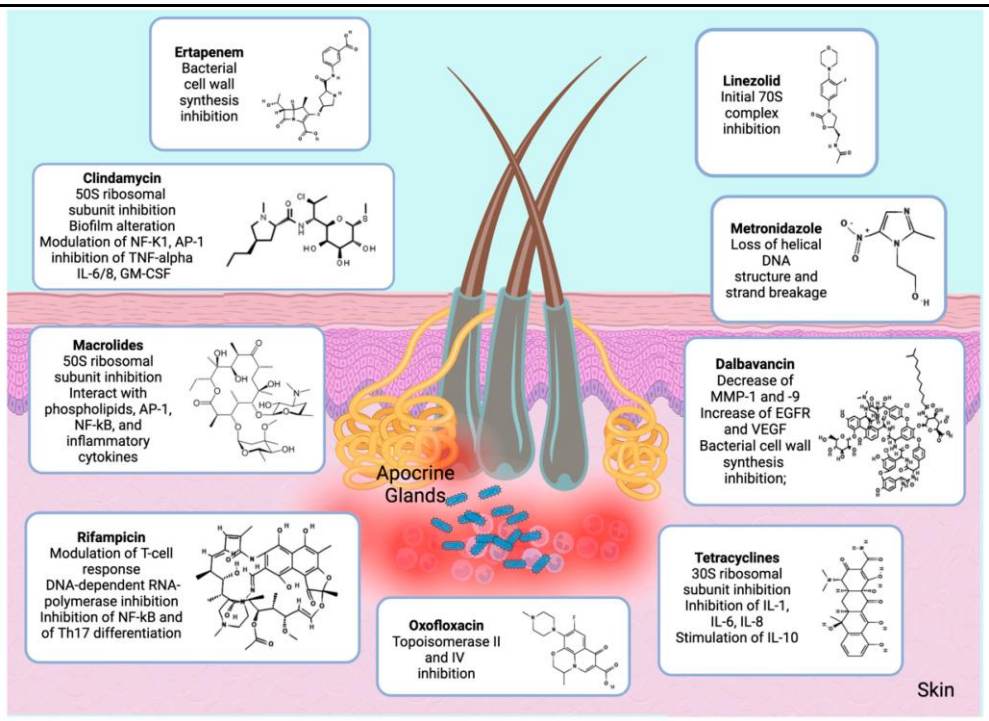


31

Mild
IHS4 1-3

Should be recommended
Tetracyclines p.o. — 1st line

May be considered
Clindamycin 2x300 mg/d p.o. — 1st line
Acitretin 0.25-0.50 mg/kg/d p.o. — 3rd line
Hormonal antiandrogens — 3rd line
Metformin p.o. — 3rd line

May be considered
Clindamycin 1% gel/lotion/cream — 1st line
Resorcinol 15% peel 2x/d — 1st line
Intralesional triamcinolone 10-40 mg/ml — 1st line
Zinc gluconate 90 mg/d p.o. — 2nd line
PDT — 3rd line
Dapsone 25–200 mg/d p.o. — 3rd line

European S2k guidelines for hidradenitis suppurativa/acne inversa part 2: Treatment. J Eur Acad Dermatol Venereol. 2025;39:899–941. https://doi. org/10.1111/jdv.20472

32

Hidradenitis Treatment Overview

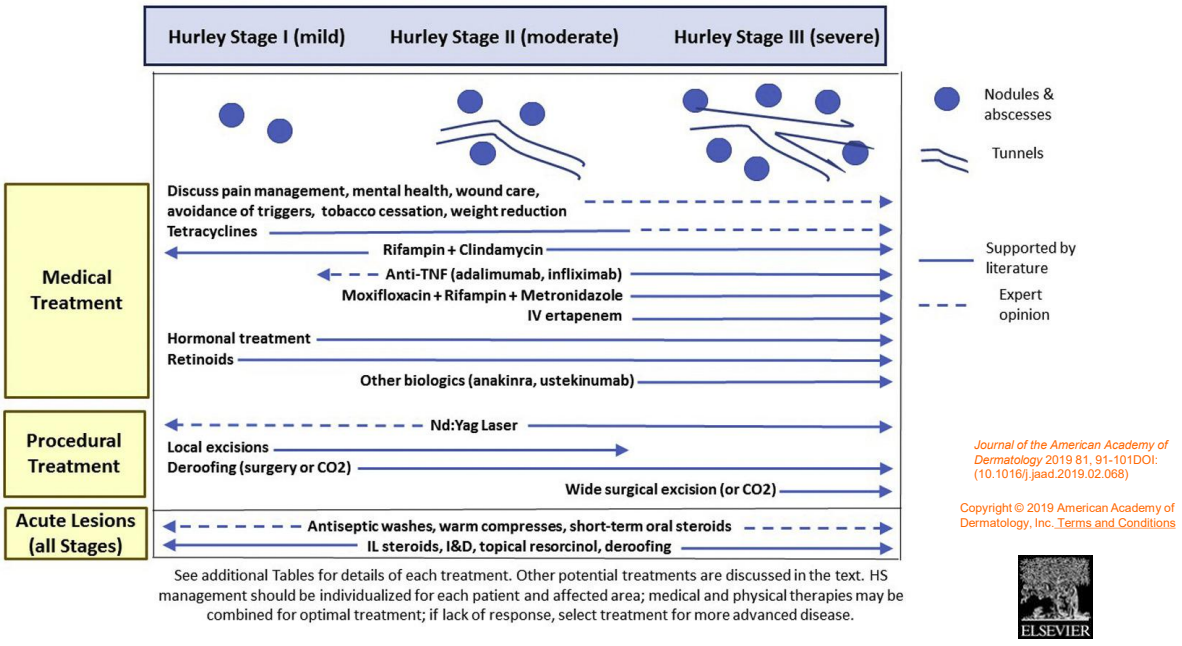
- Lifestyle modifications – smoking cessation, weight loss
- oral antibiotics – doxycycline, clindamycin
- topical antibiotics - clindamycin
- intralesional injections with triamcinolone 10mg/mL
- avoid incision and drainage unless a true abscess forms
- deroofing procedure
- refer for injectable Biologics
- refer for Plastic surgery

33

Pain Management

- Pain management in HS starts with disease control.
- Acetaminophen, NSAID for acute and chronic pain
- Gabapentin or pregabalin for neuropathic pain
- Duloxetine for chronic pain (nociceptive, neuropathic, psychological)
- Use of opioids must be considered judiciously, but they are sometimes necessary.
- Tramadol should be considered as an alternative to conventional opioids
- Codeine, hydrocodone and other opioids can manage pain that does not respond to first-line agents.
  - North American clinical management guidelines for hidradenitis suppurativa. 2019

34



35

Topical

Recommendations	Strength of recommendation	Level of evidence	References
Topical/IL therapies			
Clindamycin	C	II, III	1, 2
Zinc pyrithione	C	III	3
Chlorhexidine	C	Expert opinion	
Resorcinol	C	III	4
Triamcinolone (IL)	C	III	5, 6
Benzoyl peroxide	C	III	7

North American clinical management guidelines for hidradenitis suppurativa: A publication from the United States and Canadian Hidradenitis Suppurativa Foundations
Alikhan, Ali et al.

36

Systemic Antibiotics

Systemic antibiotics			
Tetracyclines	C	II, III	2, 8, 9
Rifampin + clindamycin	B	II	10, 11, 12, 13, 14, 15, 16
Rifampin + moxifloxacin + metronidazole	C	II	17

Doxycycline 100 mg bid is a good initial therapy

Rifampin 300 mg bid and clindamycin 300 mg bid

37

Oral Clindamycin

- Oral clindamycin was as good as clindamycin plus rifampin
- 300 mg bid is the dosing
- Less diarrhea and side effects

- Caposiena Caro RD, et al. Clindamycin versus clindamycin plus rifampicin in Hidradenitis Suppurativa treatment: clinical and ultrasound observations. J Am Acad Dermatol. 2018 Nov 28.

38

Hormonal

Hormonal therapies			
Antiandrogen contraceptives	C	II	22, 23
Spironolactone	C	III	24
Metformin	C	III	25

Spironolactone for women – 50 mg daily to 100 mg bid
(avoid if pt on ACEI)
Oral contraceptive pill for young women especially if contraception needed.
Same ones we use for acne that are anti-androgenic
Finasteride 1- 5 mg daily for men or women

39

Metformin?

- 53 HS patients received metformin; 85% female; mean age was 37 years and mean weight was 102 kg.
- mean duration of metformin - 11.3 months
- mean dose was 1.5 g/day
- Subjective clinical response was seen in 68%
- 25% had no improvement.
- Insulin resistance was seen in 75%. Its presence did not predict clinical response to metformin.

- Jennings L, Hambly R, Hughes R, Moriarty B, Kirby B. Metformin use in hidradenitis suppurativa. J Dermatolog Treat. 2019 Mar 20:1-3.

40

Hormonal Response Rates

- 62.8% (27/43) finasteride
- 50.5% (51/101) spironolactone
- 46.0% (74/161) metformin
- Hormonal Treatments in Hidradenitis Suppurativa: A Systematic Review. J Drugs Dermatol. 2023 Aug 1;22(8):785-794. doi: 10.36849/jdd.7325. PMID: 37556513.

41

Systemic Therapy with Higher Risk Medications
Prescribe or Refer for These Treatments When Needed

Retinoids			
Isotretinoin	B	II	27, 28, 29, 30, 31, 32
Acitretin	B	II	33, 34, 35, 36
Biologics			
Adalimumab	A	I	48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66
Infliximab	B	II	65, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77
Anakinra	B	II	78, 79, 80, 81, 82
Ustekinumab	B	II	83, 84, 85, 86, 87

42

Biologics – for Psoriasis That Work for HS

- TNF inhibitors:
  - Adalimumab — Humira – first - FDA approval for HS
  - Infliximab — Remicade
- IL-17 antagonists:
  - Secukinumab — Cosentyx – second - FDA for HS
  - Brodalumab — Siliq
  - Bimekizumab — Bimzelx – third –FDA approved HS
- IL-23 antagonists:
  - Ustekinumab (IL-12 and 23) — Stelara

43

Evidence That Humira Works

- Adalimumab administered weekly resulted better clinical responses than placebo
  - And significantly improved disease severity and quality of life of patients with moderate-to-severe HS.
- Dosing is 40 mg weekly or 80 mg every other week after 160 mg starting dose
- Lu JW, Huang YW, Chen TL. Efficacy and safety of adalimumab in hidradenitis suppurativa: A systematic review and meta-analysis of randomized controlled trials. Medicine (Baltimore). 2021 Jun 4;100(22):e26190.

44

Infliximab

- Infusion
- Up to 10 mg/kg per IV dose
- Can be repeated as often as q4 weeks in severe disease

- Ghias MH, Johnston AD, Kutner AJ, Micheletti RG, Hosgood HD, Cohen SR. High-dose, high-frequency infliximab: A novel treatment paradigm for hidradenitis suppurativa. J Am Acad Dermatol. 2020 May;82(5):1094-1101. doi: 10.1016/j.jaad.2019.09.071. Epub 2019 Oct 4. PMID: 31589948.

45

IL-17 Inhibitors for HS

- secukinumab 57.1% (*n* = 60/105) of patients were responders in a mean response period of 16.2 weeks
- brodalumab, 100.0% (*n* = 22/22) of patients were responders within 4.4 weeks

- Kashetsky N, Mufti A, Alabdulrazzaq S, Lytvyn Y, Sachdeva M, Rahat A, Yeung J. Treatment Outcomes of IL-17 Inhibitors in Hidradenitis Suppurativa: A Systematic Review. J Cutan Med Surg. 2021 Aug 8:12034754211035667. doi: 10.1177/12034754211035667. Epub ahead of print. PMID: 34365863.

46

Bimekizumab (Bimzelx)

Newest biologic for HS - inhibits interleukin IL-17F and IL-17A

1: Efficacy and safety of bimekizumab in patients with moderate-to-severe hidradenitis suppurativa (BE HEARD I and BE HEARD II): two 48-week, randomised, double-blind, placebo-controlled, multicentre phase 3 trials. Lancet. 2024 Jun 8;403(10443):2504-2519.

2: Efficacy and Safety of Bimekizumab in Moderate to Severe Hidradenitis Suppurativa: A Phase 2, Double-blind, Placebo-Controlled Randomized Clinical Trial. JAMA Dermatol. 2021 Nov 1;157(11):1279-1288. doi: 10.1001/jamadermatol.2021.2905. Erratum in: JAMA Dermatol. 2021 Nov 1;157(11):1384.

3: Psychometric validation and interpretation thresholds of the Hidradenitis Suppurativa Quality of Life (HiSQOL©) questionnaire using pooled data from the phase III BE HEARD I & II trials of bimekizumab in hidradenitis suppurativa. Br J Dermatol. 2025 Jun 20;193(1):93-104. doi: 10.1093/bjd/ljaf067. Erratum in: Br J Dermatol. 2025 Aug 13:ljaf292.

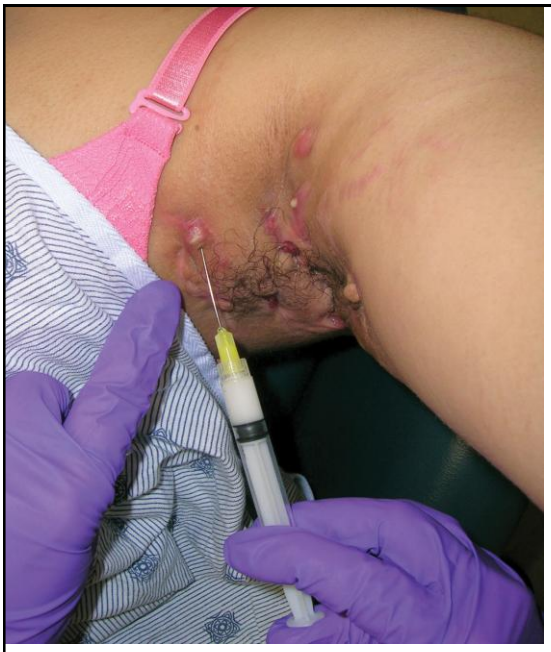
47

Central Sensitization and Pain

- Alteration and amplification of pain perception
- Patients with HS had more than 4 times the odds of having central sensitization (CS) compared with age- and sex-matched controls.
- Suggests we are not adequately measuring and treating HS-associated pain.
- Active screening for CS and depressive symptoms in patients with HS is recommended.

- Aarts P, Aitken JJ, van Straalen KR. Prevalence of Central Sensitization in Patients With Hidradenitis Suppurativa. *JAMA Dermatol.* Published online August 18, 2021. doi:10.1001/jamadermatol.2021.291

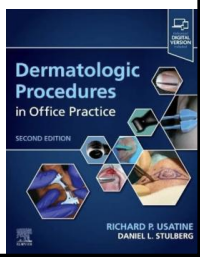
48



Intralesional Triamcinolone

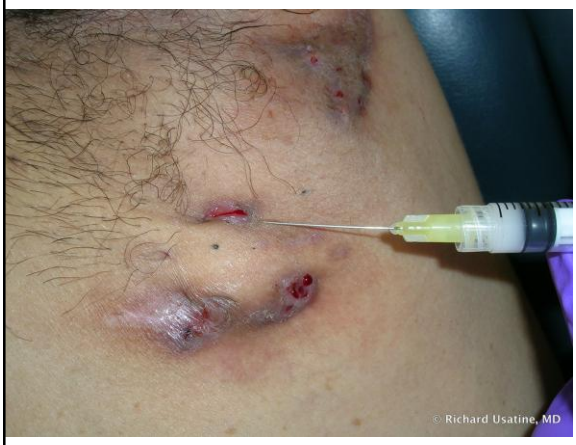
- intralesional triamcinolone 10 mg/mL into inflamed HS lesions (no dilution needed)
- Inject about 0.2-0.5 mL per lesion (stop when steroid leaks or squirts out)
- Use 27 -30 gauge needle
- Maximum of 4 mL per visit (40 mg)

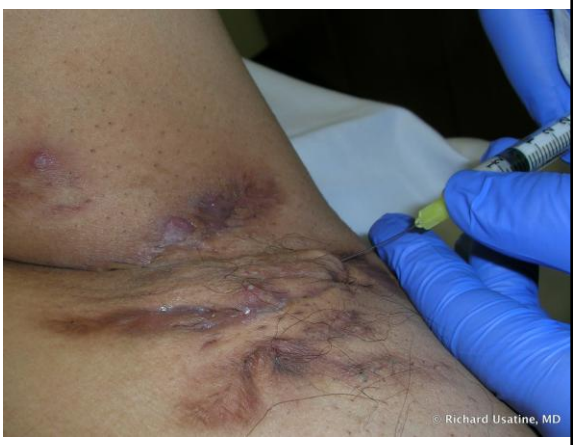
- Patients report decrease in pain and tenderness within minutes to hours
- Can repeat monthly



49

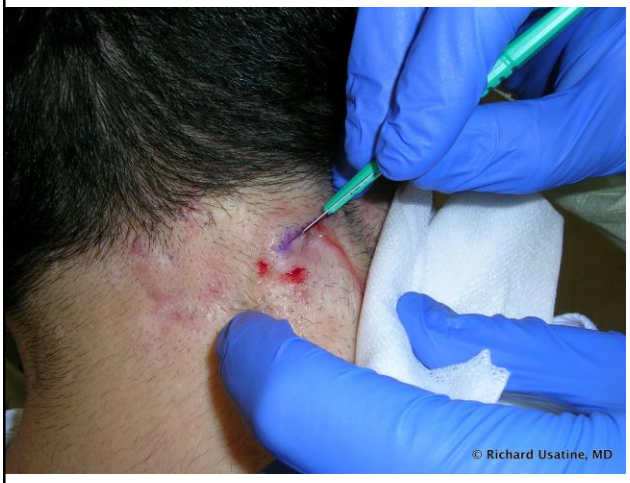
Injecting Steroid Is Usually Preferable to Cutting the Skin

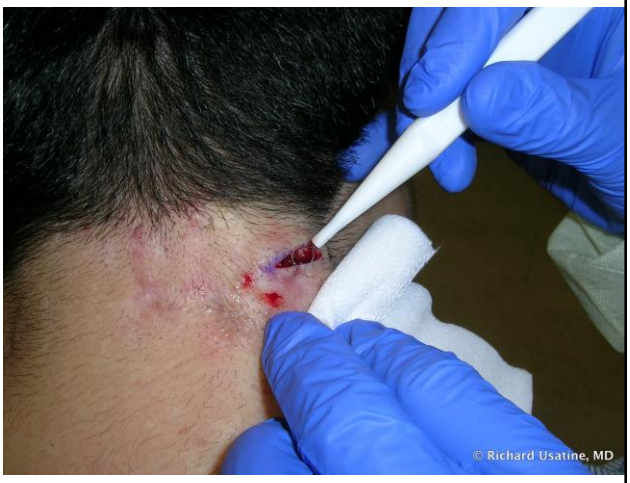




50

Deroofing/Unroofing Lesions When Injections Not Working





51

Curette Out Gelatinous Material and Leave Open

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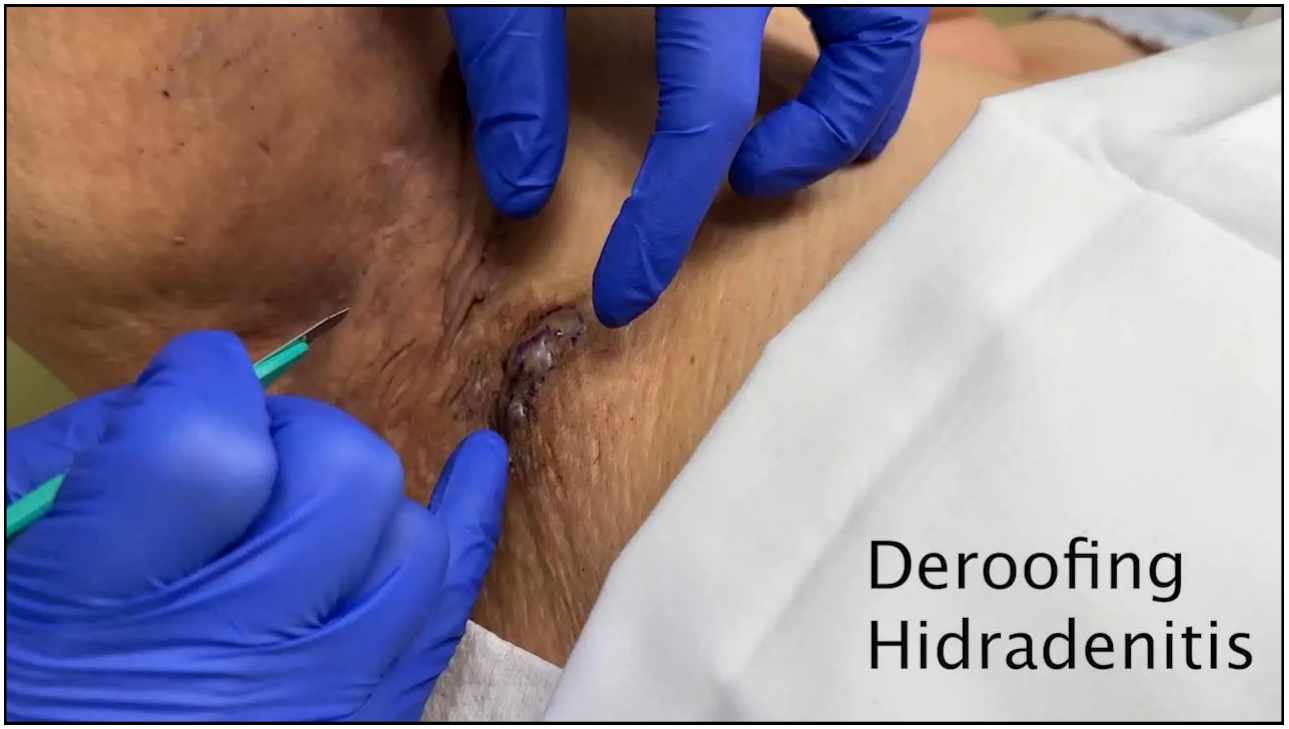
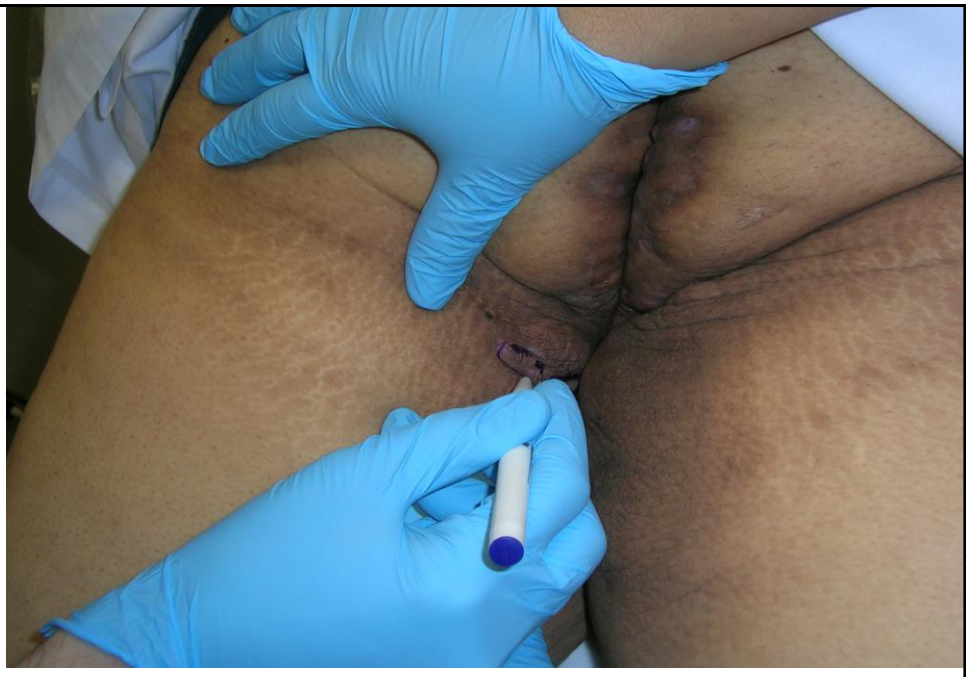
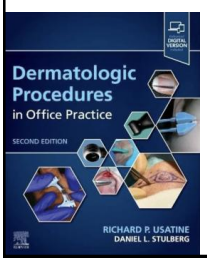


53

Deroofing

From Start to Healing





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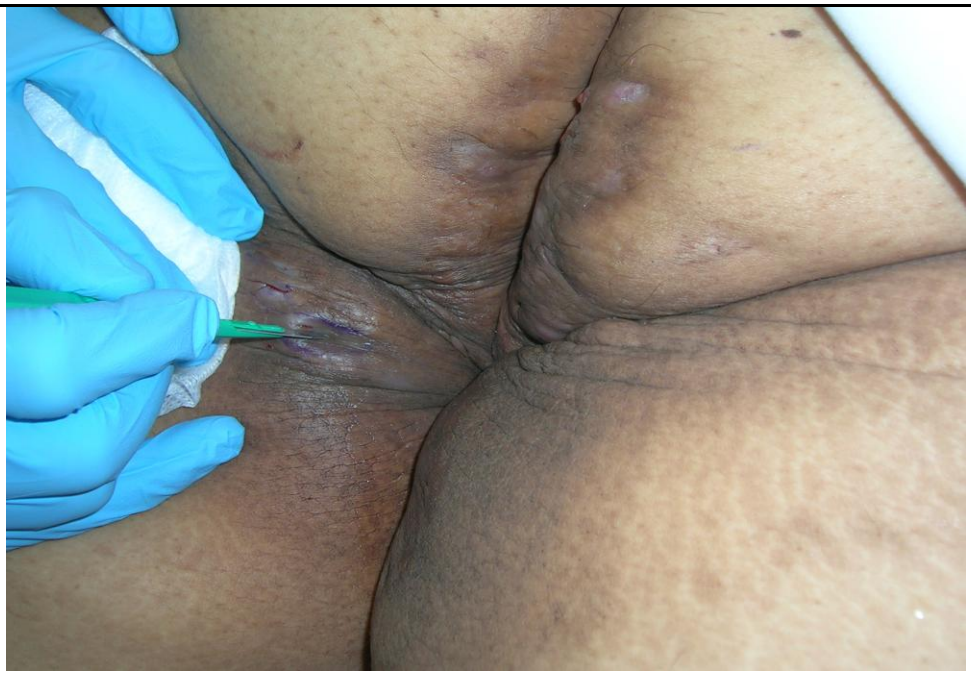

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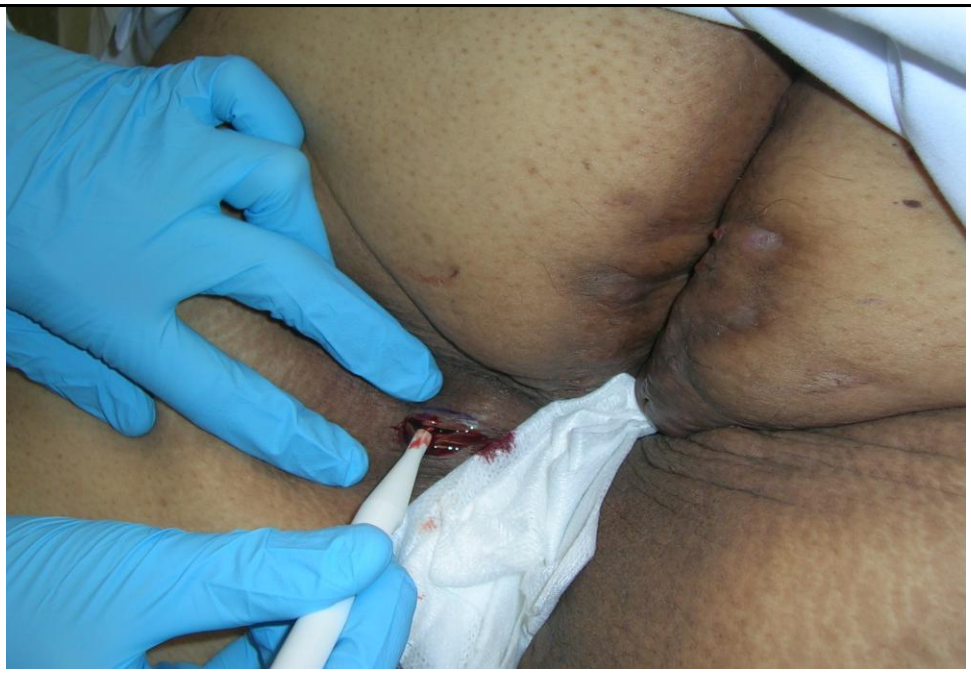

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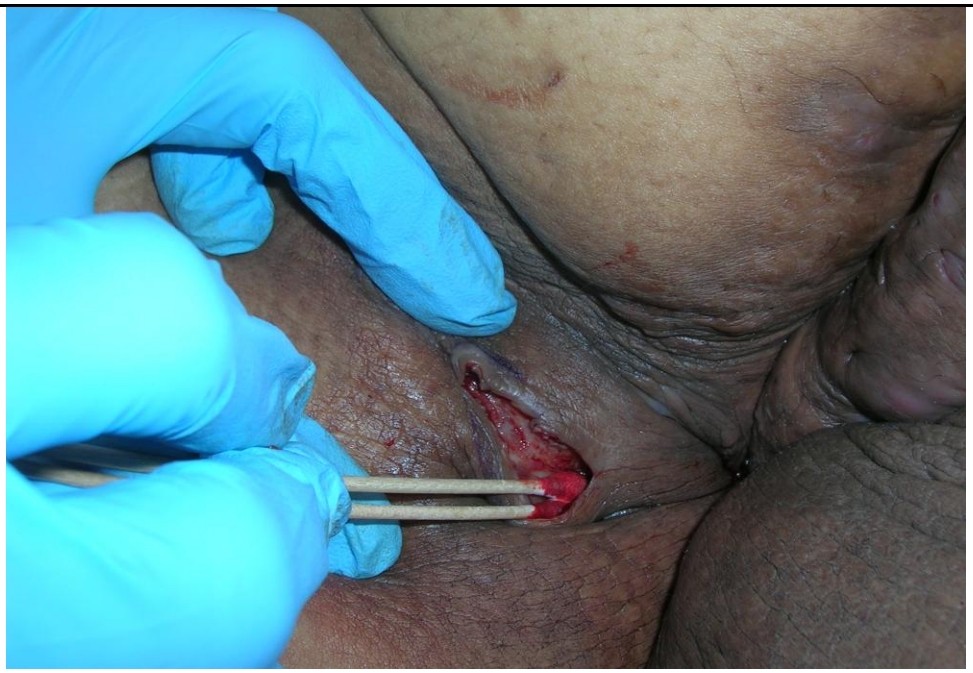

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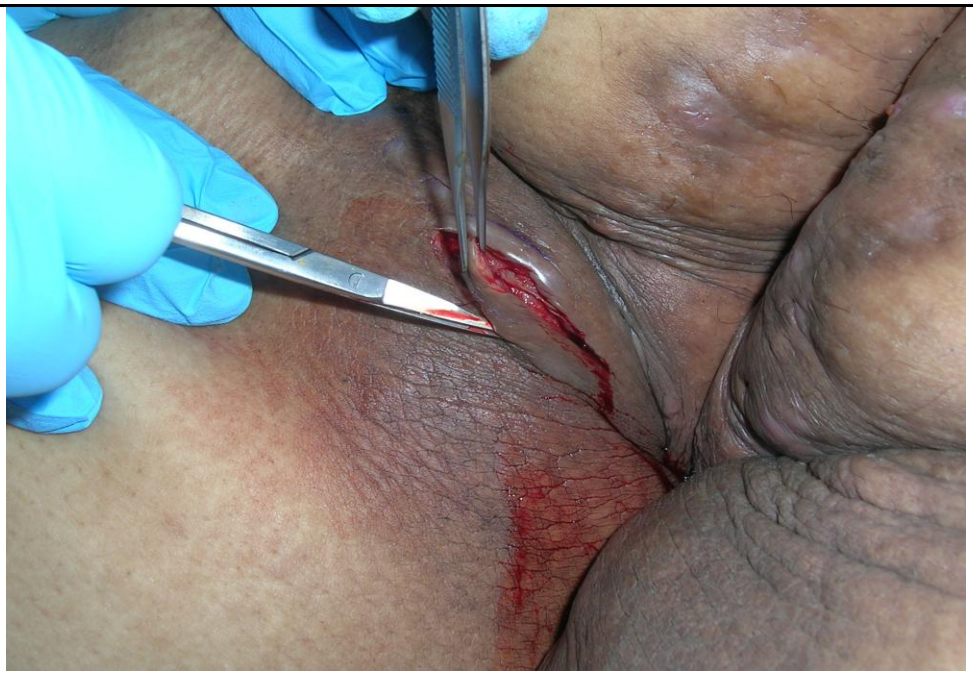

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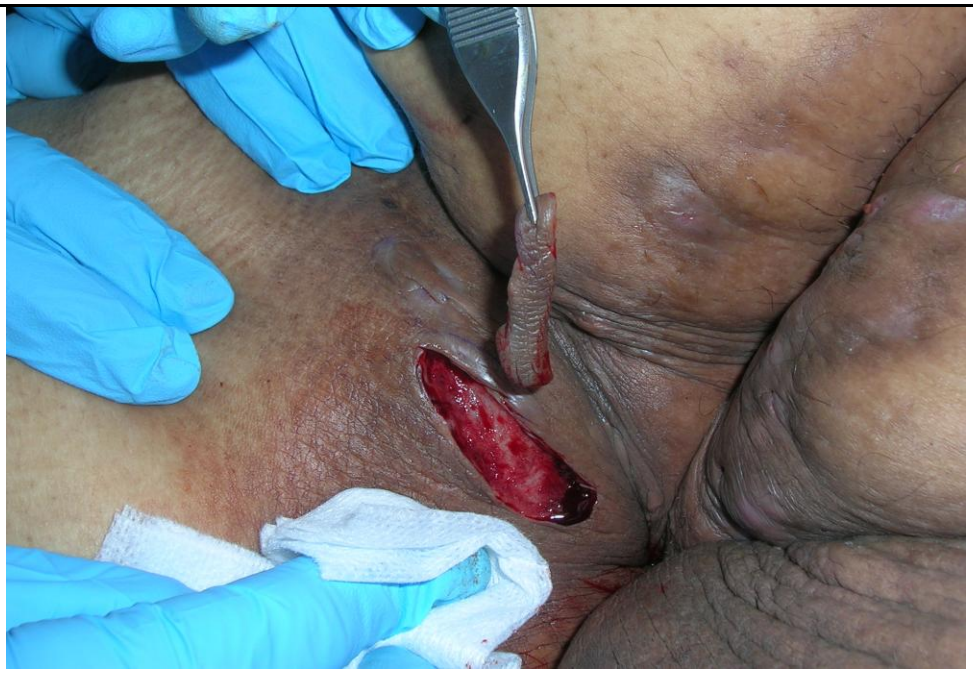

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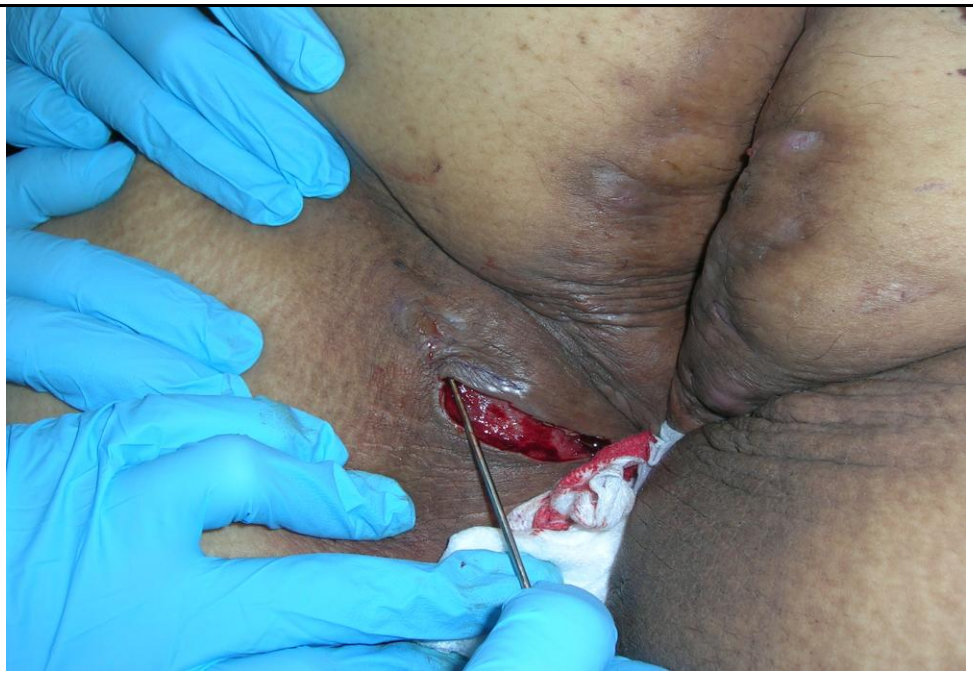

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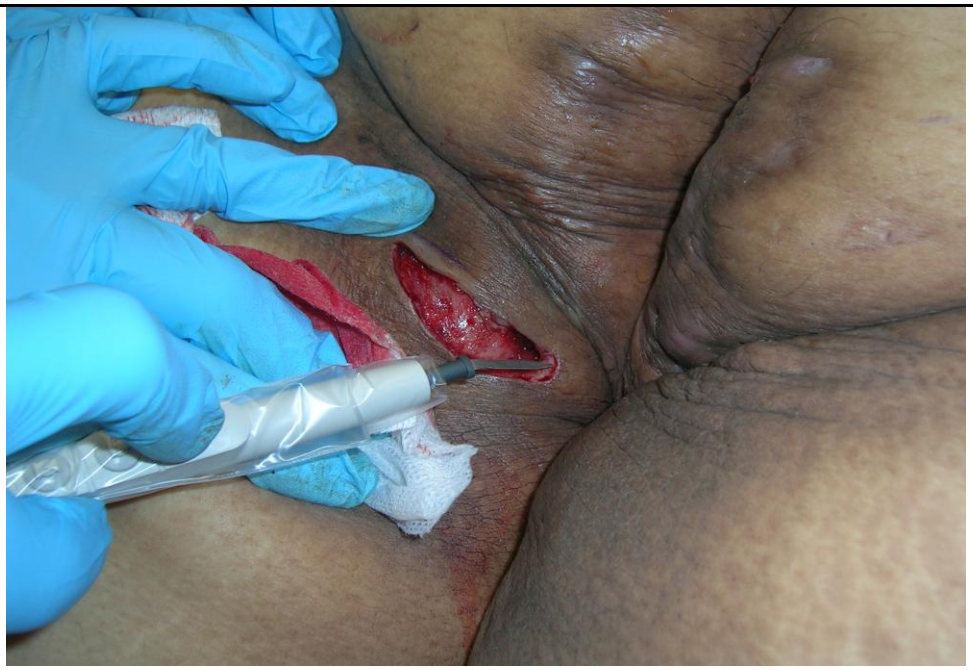

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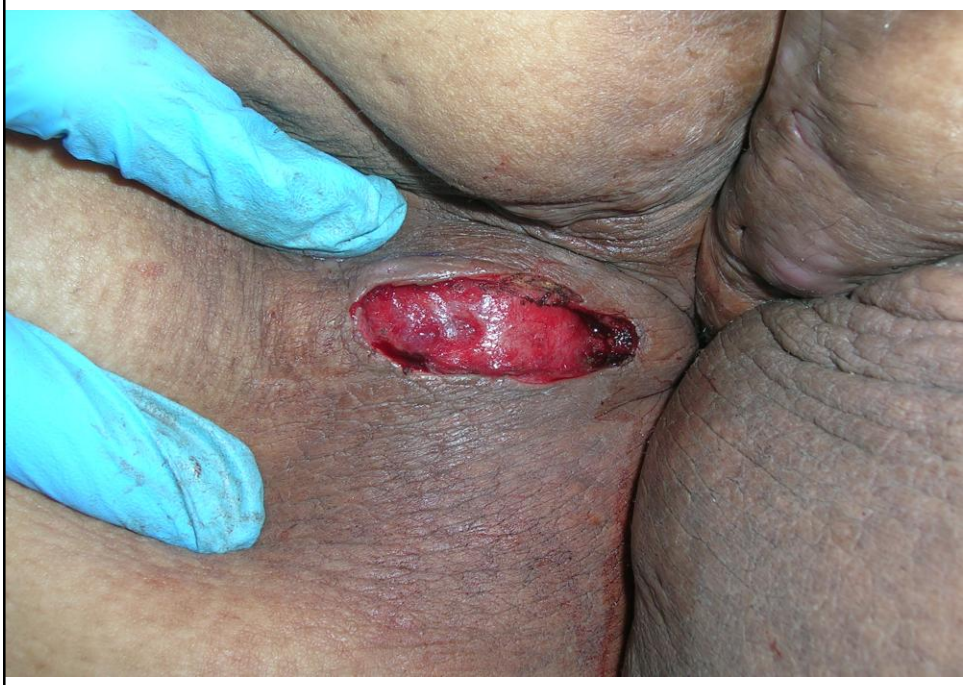

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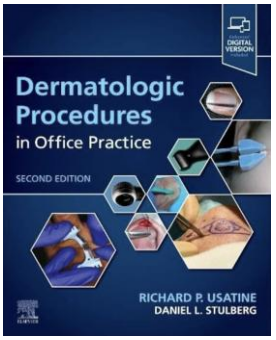

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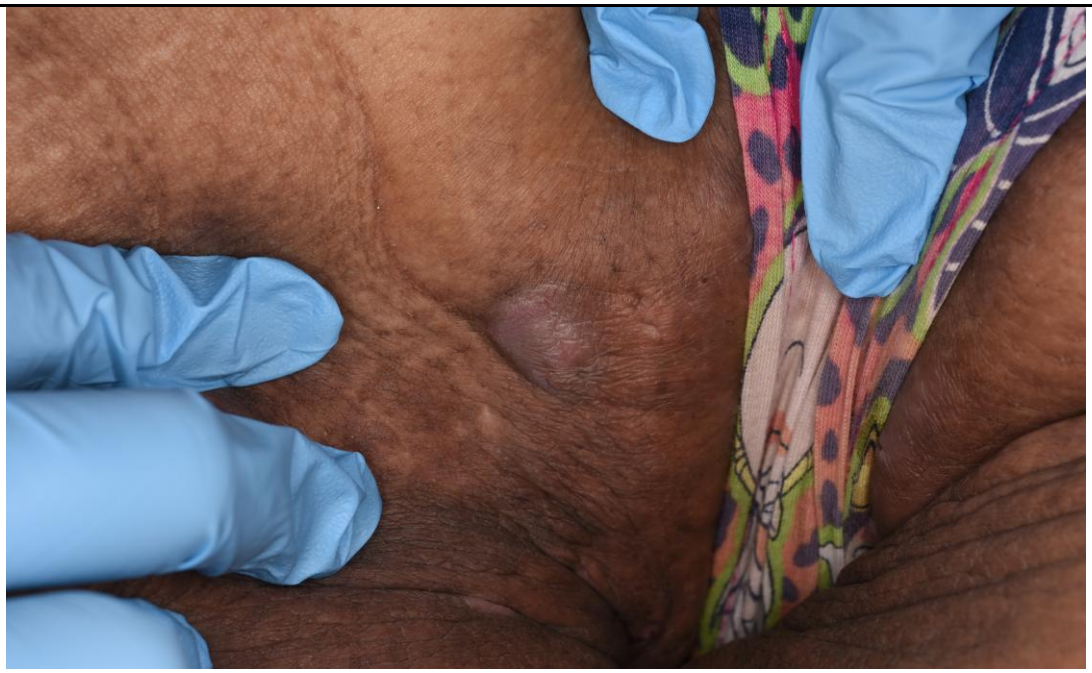
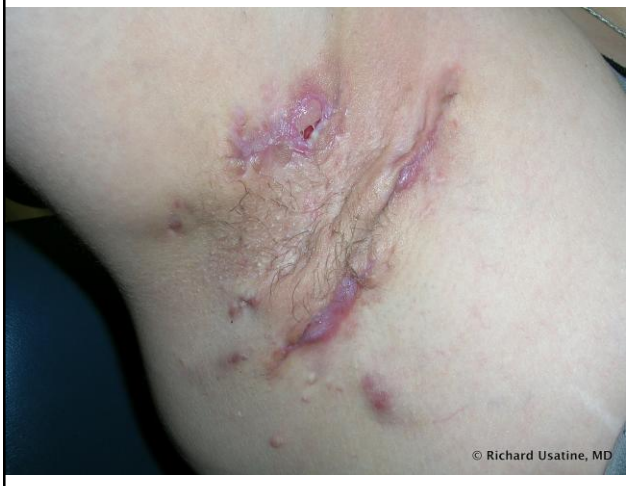
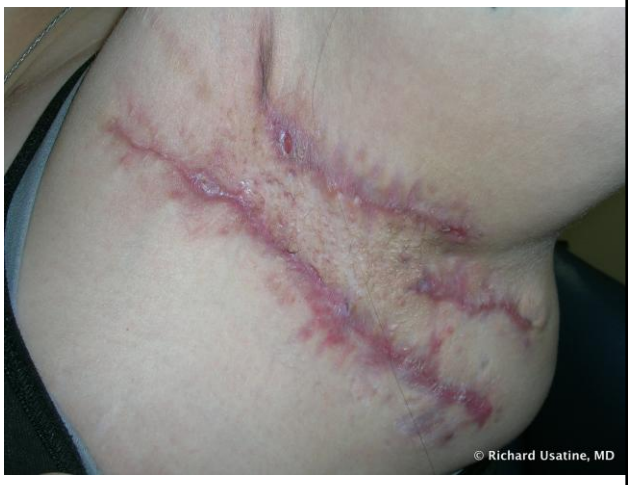


63

Surgery Referral When Medical Treatment Failing





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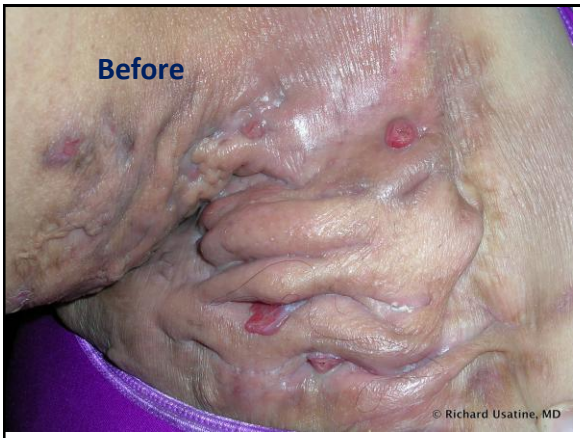
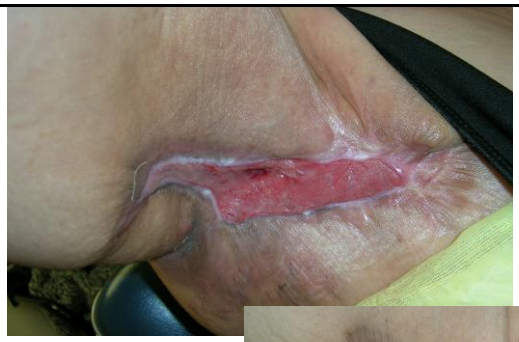
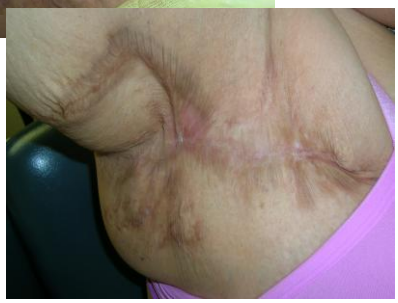






Plastic Surgery with Second Intention Healing Over 5 Months

65

Hidradenitis Treatment Summary

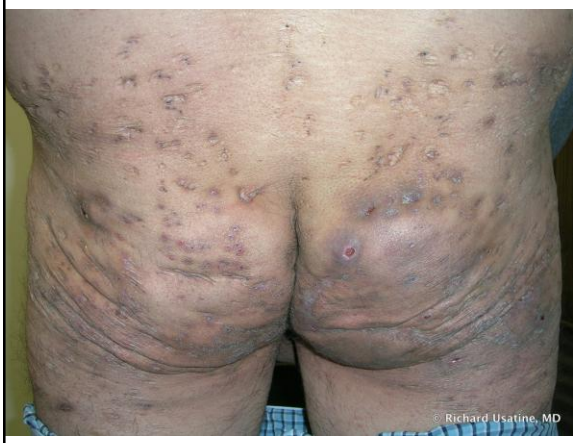
- Smoking cessation and weight loss when indicated
- topical clindamycin gel and washing with chlorhexidine
- oral antibiotics
- Intralesional triamcinolone as needed
- Pain management and supportive counseling

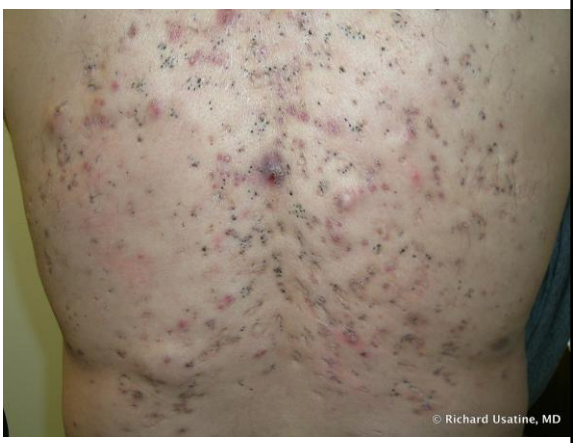
- Start or refer for biologic therapy
- Use deroofing surgery as needed
- Refer for plastic surgery if all treatments fail or case is severe

- Options with less evidence:
- anti-androgenic medications for females (spironolactone or OCP)
- Oral zinc gluconate OTC – 30 mg daily to TID or topical zinc
- Consider metformin

66

Follicular Occlusion (Hidradenitis and Acne Conglobata)

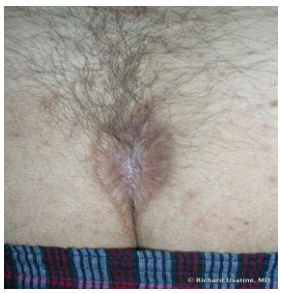


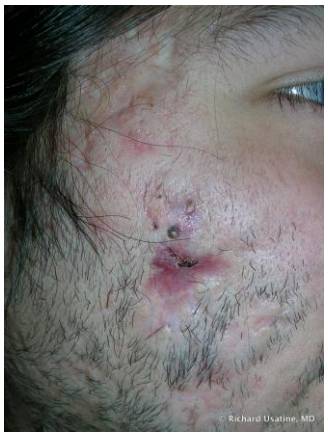


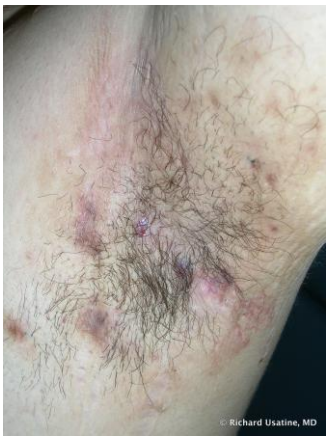
67

Follicular Occlusion Triad and Tetrad

1. Hidradenitis
2. Acne conglobata
3. Dissecting cellulitis of scalp
4. Pilonidal cyst

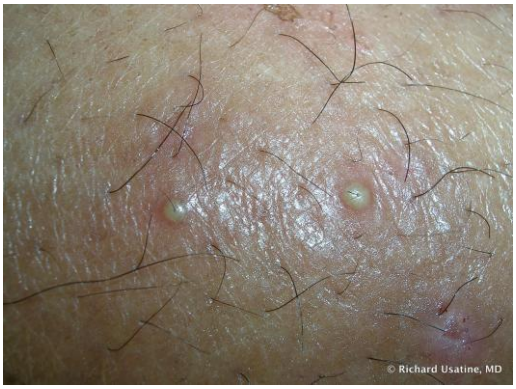


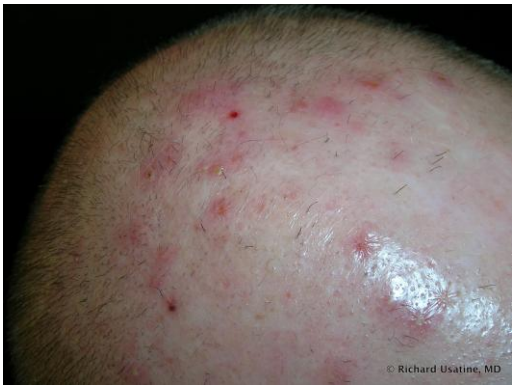




68

Folliculitis - Bacterial





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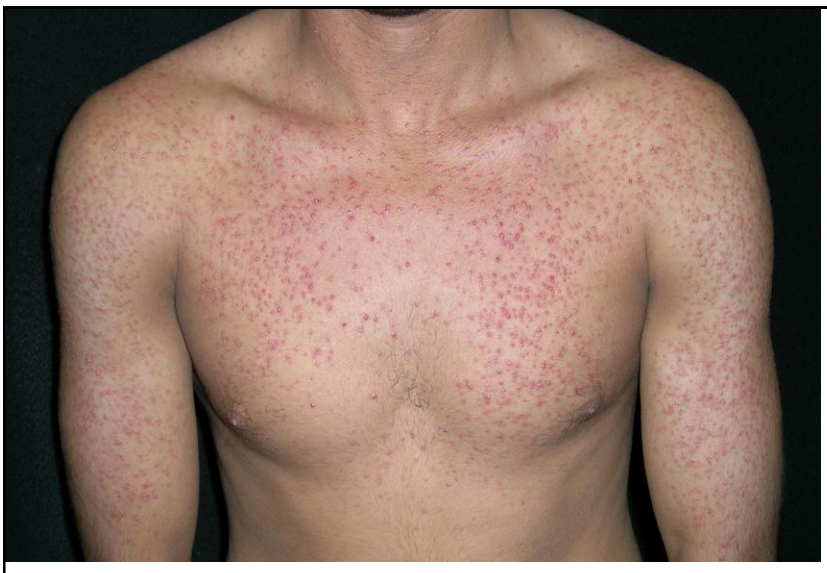
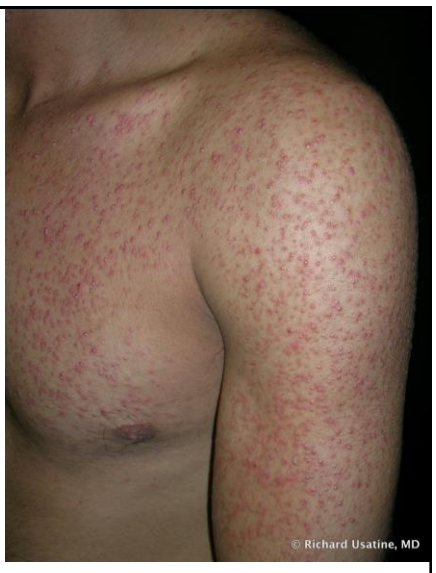
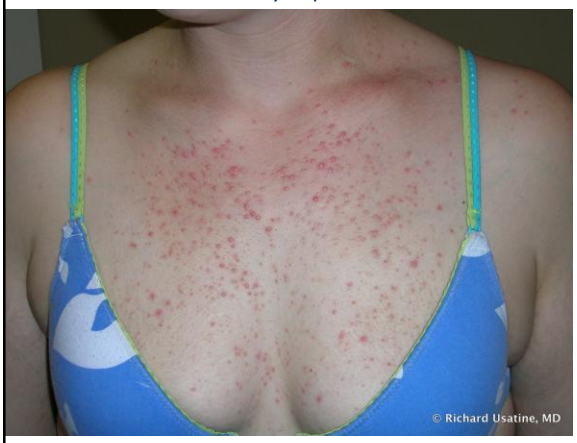



Pityrosporum Folliculitis – Cape-like Distribution

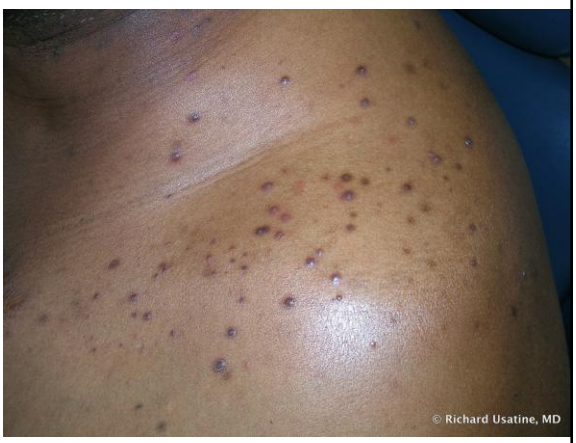
70

Folliculitis – Which Type?

Pityrosporum

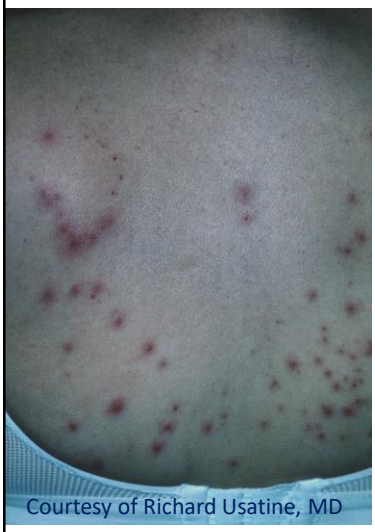


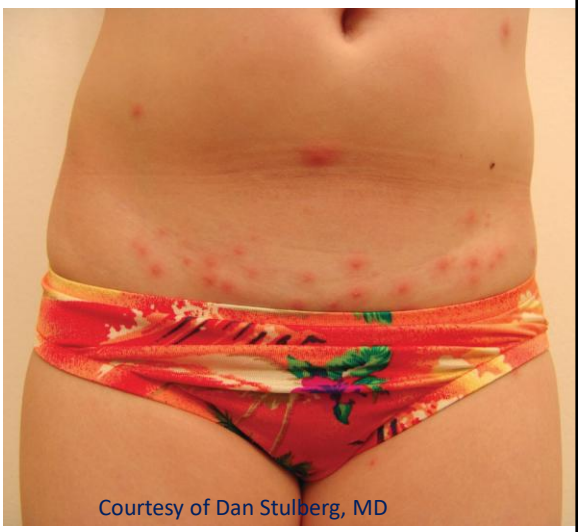
Bacterial



71

Hot Tub Folliculitis - Pseudomonas


Courtesy of Richard Usatine, MD


Courtesy of Dan Stulberg, MD

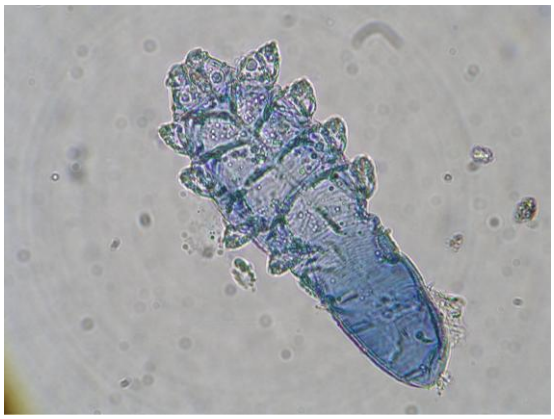
72

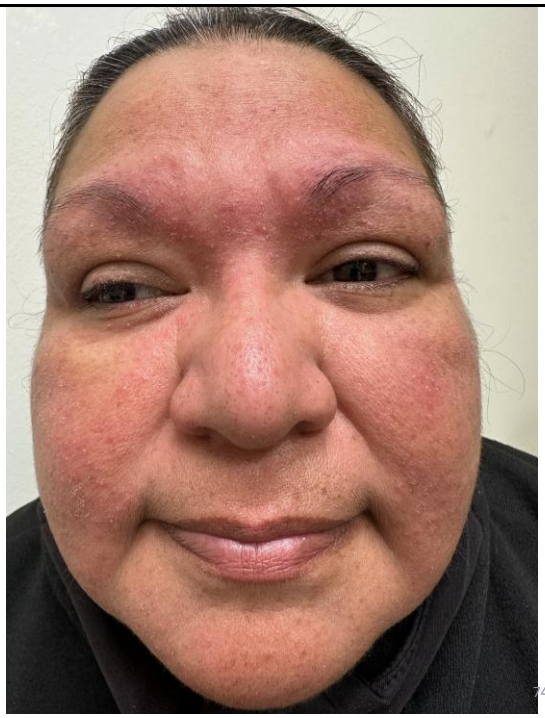
Folliculitis – Common Causes and Treatments

- Bacterial – mostly Staph aureus, also Pseudomonas from hot tub
  - Topical clindamycin
  - Oral cephalexin 500 mg bid or doxycycline 100 mg bid x 10-14 days
  - If hot tub related – avoid and clean the hot tub
    - Cipro is an option if not self-resolving
- Fungal – Pityrosporum = Malassezia (same cause as tinea versicolor)
  - Fluconazole 200 mg daily x 10-14 days (if healthy liver)
  - Ketoconazole shampoo

73

Demodex Folliculitis





74

74

Demodex Folliculitis - Demodicosis

Treatment options with some evidence:

- Topical metronidazole
- Topical permethrin
- Topical ivermectin 1% cream
- Oral ivermectin
- Oral metronidazole
- Tea tree oil

75

Consider Oral Ivermectin and Oral Metronidazole Combined

Contents lists available at SciVerse ScienceDirect

International Journal of Infectious Diseases

journal homepage: www.elsevier.com/locate/ijid

Evaluation of the efficacy of oral ivermectin in comparison with ivermectin–metronidazole combined therapy in the treatment of ocular and skin lesions of *Demodex folliculorum*

Doaa Abdel-Badie Salem [a,*], Atef El-shazly [a], Nairmen Nabih [a], Youssef El-Bayoumy [b], Sameh Saleh [c]

[a] Medical Parasitology Department, Faculty of Medicine, Mansoura University, Gomhoria Street, Mansoura City, Egypt
[b] Dermatology and Andrology Department, Faculty of Medicine, Mansoura University, Mansoura City, Egypt
[c] Ophthalmology Department, Faculty of Medicine, Mansoura University, Mansoura city, Egypt

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SUMMARY

Objective: To evaluate the efficacy of ivermectin and combined ivermectin–metronidazole therapy in the treatment of ocular and skin lesions of *Demodex folliculorum*.
Methods: One hundred twenty patients with skin lesions and anterior blepharitis, whose infestation was treatment-resistant and who had a Demodex count >5 mites/cm^2 for skin lesions or ≥3 mites at the root of each eyelash, were recruited. The treatment regimens were ivermectin and ivermectin–metronidazole combined therapy. We enrolled 15 patients from each of four groups for each treatment regimen. Demodex was detected by standardized skin surface biopsy for skin lesions. Three eyelashes

76

76

Oral Ivermectin and Oral Metronidazole Combined for Demodex Folliculitis

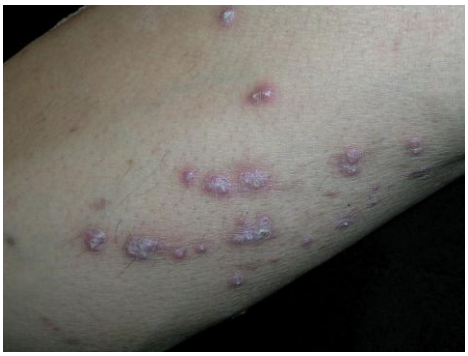
- Combined therapy was better than ivermectin alone
- Metronidazole 250 mg tid for 14 days
- Oral ivermectin 0.2mg/kg (usually 12-18 mg) once and repeated in 7 days

Salem DA, El-Shazly A, Nabih N, El-Bayoumy Y, Saleh S. Evaluation of the efficacy of oral ivermectin in comparison with ivermectin-metronidazole combined therapy in the treatment of ocular and skin lesions of Demodex folliculorum. Int J Infect Dis. 2013 May;17(5):e343-7. doi: 10.1016/j.ijid.2012.11.022. Epub 2013 Jan 5. PMID: 23294870.

77

Less Common Forms of Folliculitis

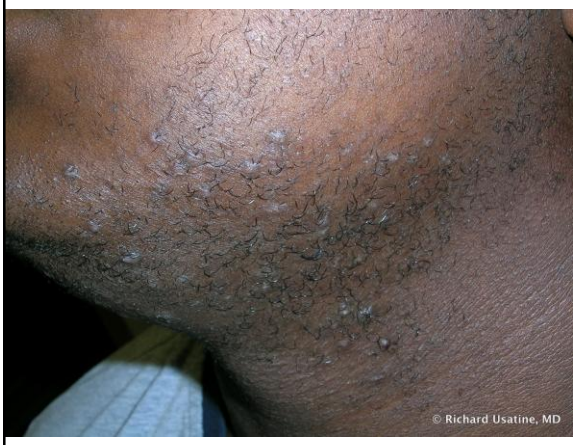
- Eosinophilic folliculitis in HIV
- Herpes folliculitis in HIV
- Folliculitis decalvans on scalp
- Perforating folliculitis – usually in patients on dialysis
- Gram negative folliculitis in persons on prolonged antibiotic use for acne
- Tight clothing – work-out clothing can do this

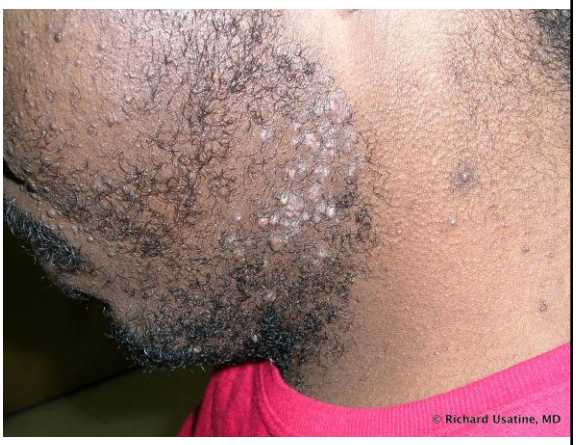


Perforating folliculitis

78

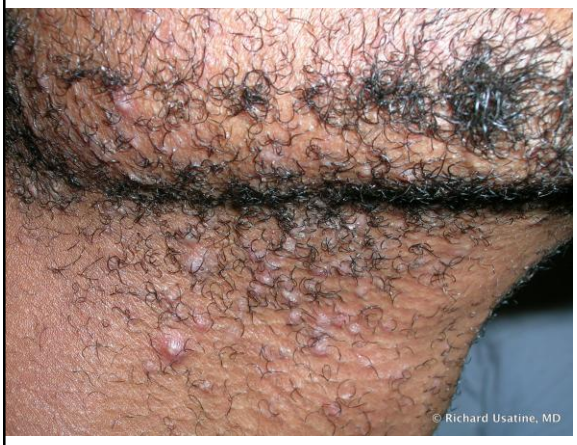
Pseudofolliculitis Barbae (Razor Bumps)

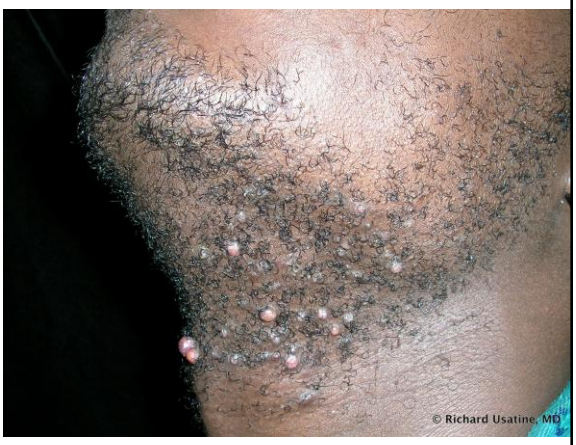




79

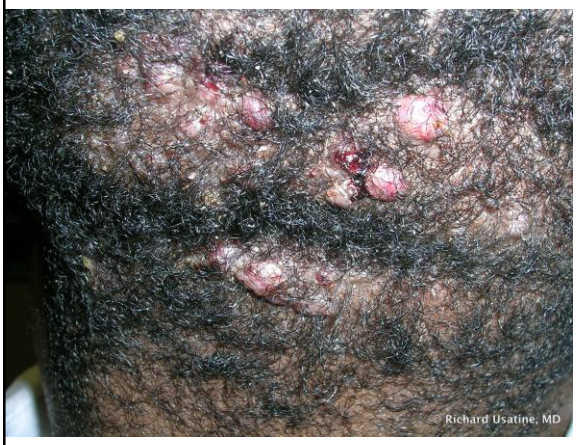
Pseudofolliculitis Barbae

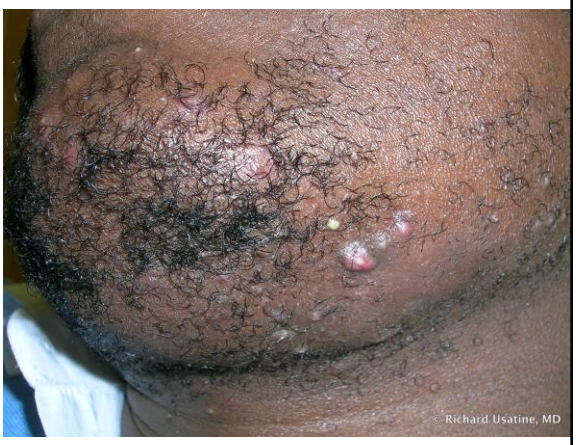




80

Follicular Occlusion – Scalp and Face
Acne Keloidalis Nuchae and Pseudofolliculitis

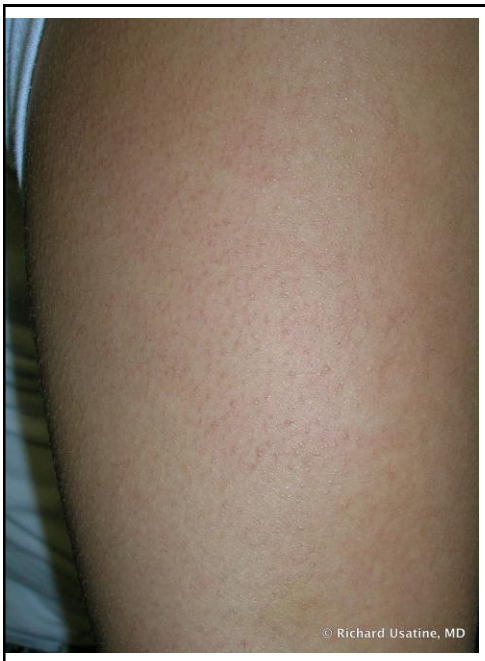




81

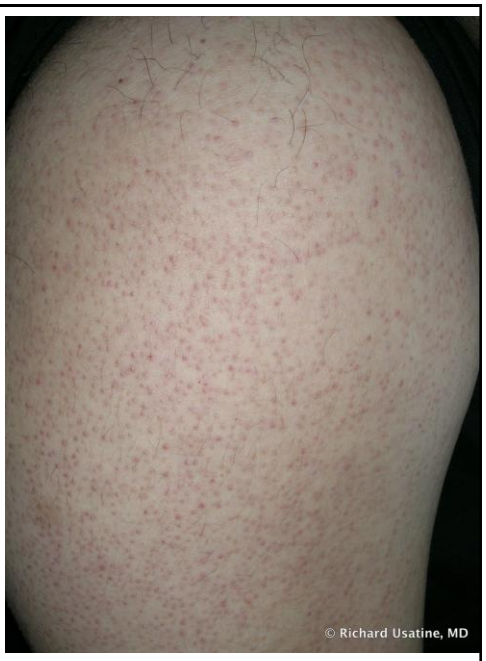
Pseudofolliculitis Treatments

- avoid shaving if possible
- chemical or laser hair removal
- Topical eflornithine HCL 13.9% cream (Vaniqa) may be used to inhibit hair growth.
- Topical corticosteroid
- Topical antibiotic
- Oral Doxycycline 100 mg bid



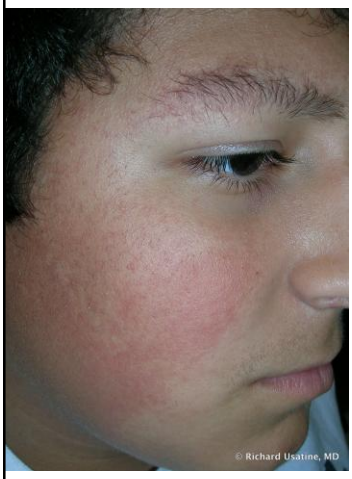
Keratosis Pilaris

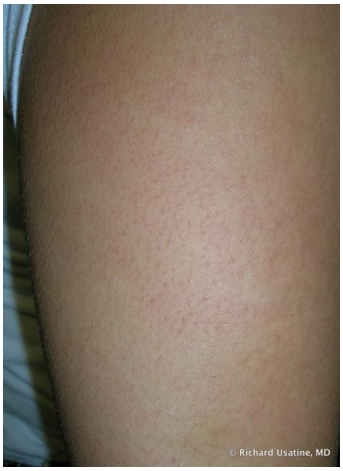
Chicken Skin

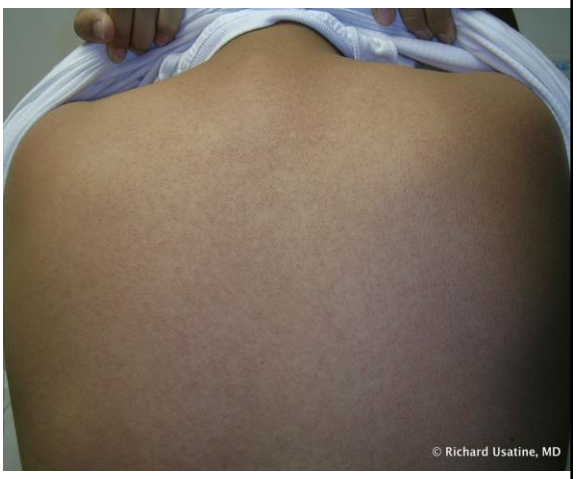


83

Keratosis Pilaris – 15 yo Boy

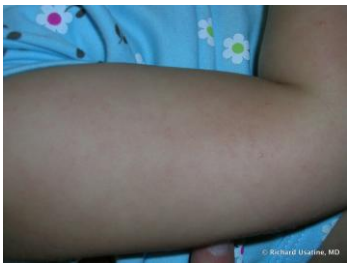


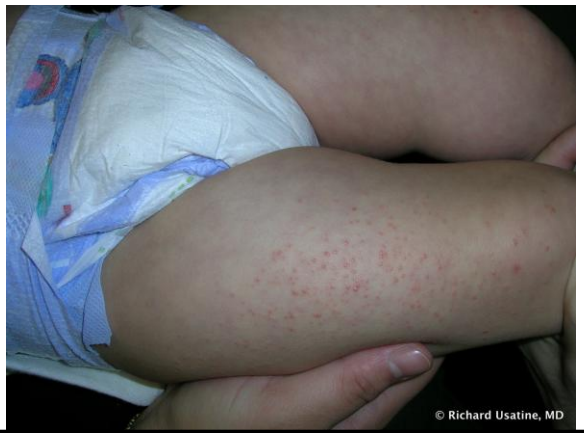




84

Keratosis Pilaris – Can Start in Infancy





85

Keratosis Pilaris Treatment

- Education – it is hereditary and lifelong
- No treatment necessary if asymptomatic and the appearance is not bothering the patient or parents
- Ammonium lactate 6% or 12% – both over-the-counter
  - Once to twice daily or just prn
- Occasionally a mild to moderate topical steroid may be helpful if there is a lot of inflammation.

86

Hidradenitis Is a Disease of:

A. Apocrine glands
B. Eccrine glands
C. Follicular units
D. Sebaceous glands

87

Why Do We Use Antibiotics to Treat Hidradenitis?

A. To treat the infection causing the purulence
B. To treat the inflammation
C. To dry up the overactive sebaceous glands
D. To avoid antibiotic resistance

88

Barriers

1. Hidradenitis can be difficult to diagnose and be mistaken for recurrent furunculosis, multiple abscesses and folliculitis
2. Hidradenitis is not curable and hard to treat with many treatment failures
3. Patients with hidradenitis suffer greatly from their disease and need your time, compassion and care

89

Practice Recommendations

1. Diagnose hidradenitis early and treat the patient with sensitivity
2. Treat hidradenitis with topical agents and oral antibiotics
3. Refer patients with hidradenitis for expert care when your treatments are not working
4. Recognize other follicular disorders and treat them based on the underlying pathophysiology

90

References for 2025 Hidradenitis Guidelines

1: Zouboulis CC, et al. European S2k guidelines for hidradenitis suppurativa/acne inversa part 2: Treatment. J Eur Acad Dermatol Venereol. 2025 May;39(5):899-941. doi: 10.1111/jdv.20472. Epub 2024 Dec 19. PMID: 39699926; PMCID: PMC12023723.

2: Frew J, et al. Australasian hidradenitis suppurativa management guidelines. Australas J Dermatol. 2025 Mar;66(2):75-89. doi: 10.1111/ajd.14388. Epub 2024 Nov 22. PMID: 39578415; PMCID: PMC11898165.