

Hoof Beats Sometimes Do Mean Zebras MMXXII

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Disclosure Slide

- We have nothing to disclose

Objectives

- Develop a practical approach to adolescents presenting with unusual clinical signs, symptoms, or confusing diagnostic tests
- Learn when to ask for help
- Review the benefits of a comprehensive risk assessment with all patients

Morning report



Our Morning report



THIS IS AN INTERACTIVE PROGRAM

1. Present history
2. Provide PMHx
3. HEADDDSSS
4. Exam findings
5. Test results/imaging
6. Diagnosis and further information

Refine ideas and
diagnosis at
every step of
the process

August 2021

- 16 yo male presents with a new, painful lesion on his scrotum
- Developed over the past 2 days
- Warm, no drainage, solitary

SHEADDDSSS Assessment

- Strengths: Strong family, great student
- Home: Mom, Dad, 14 yo brother
- Education: 10th grade - As/Bs
- Activities: Marching band, swim team, flying instructions
- Diet: Diverse diet
- What else???

SHEADDSSSS Assessment

- Drugs: Denies tobacco, marijuana, alcohol or other drug use
- Depression:
- Sexual Health: denies having any form of sexual intercourse, identifies as male, heterosexual
- Safety: Feels safe at home, uses seatbelt, no guns, denies Phys, Emotional abuse.

Further history questions?

What labs would you like to order?

**What is your differential
diagnosis?**

Actual course

- Prescribed doxycycline by urgent care
- Did not complain of further issues
- No labs were performed

January 2022

- Second lesion appears, similar in size and pain to the first - again on scrotum
- See by his pediatrician
- Labs performed, treated with doxycycline
- Cx: *normal skin flora*
- Other labs: all normal

What is your differential diagnosis?

March 2022

- Single, painful open lesion on scrotum appears
- Preceded by itching x 4 days
- Slight malodorous drainage
- Thickening of adjacent skin
- Treats w/doxy + clindamycin presumptively

- Pediatrician refers to urology and dermatology

What is your differential diagnosis?

April 2022 - Urology

- Some thickening of the scrotal skin in a line
- US performed - normal
- “no urological issues identified”

**What is your differential
diagnosis?**

May 2022 - Dermatology

Hidradenitis Suppurative



Hidradenitis Suppurative

A chronic and progressive skin disease featuring recurrent painful lesions. The lesions may drain and become malodorous. Sinus tracts develop in advanced disease

Growing evidence this this is immune mediated

Treatment plan

- Intralesional injection of triamcinolone
- Daily clindamycin
- Daily chlorhexidine wash
- Future steps:
 - Surgery
 - Laser therapy

Psychosocial impact

- Triggers:
 - Pain
 - Scarring/ disfigurement
 - Odor
 - Persistent itching
- Feeling of shame and disgust
- Challenges with employment and relationships
- Depression

Epidemiology of HS

- Rarely occurs before puberty and average age of dx is 21
- In US/European patients Female : Male = 3:1
 - South Korean: 1:2
- ~40% of patients have a family member
- Prevalence 0.7% to 1.2%
- African-Americans are 3x more likely to develop HS

Differential Dx

- Follicular
Pyoderemas
- Cutaneous Crohn's
- Cystic Acne
- Granuloma
Inguinale
- Lymphogranuloma
Venereum
- Actinomycosis
- Tuberculosis
verrucosa cutis
- Epidermoid Cyst

Pathophysiology of HS

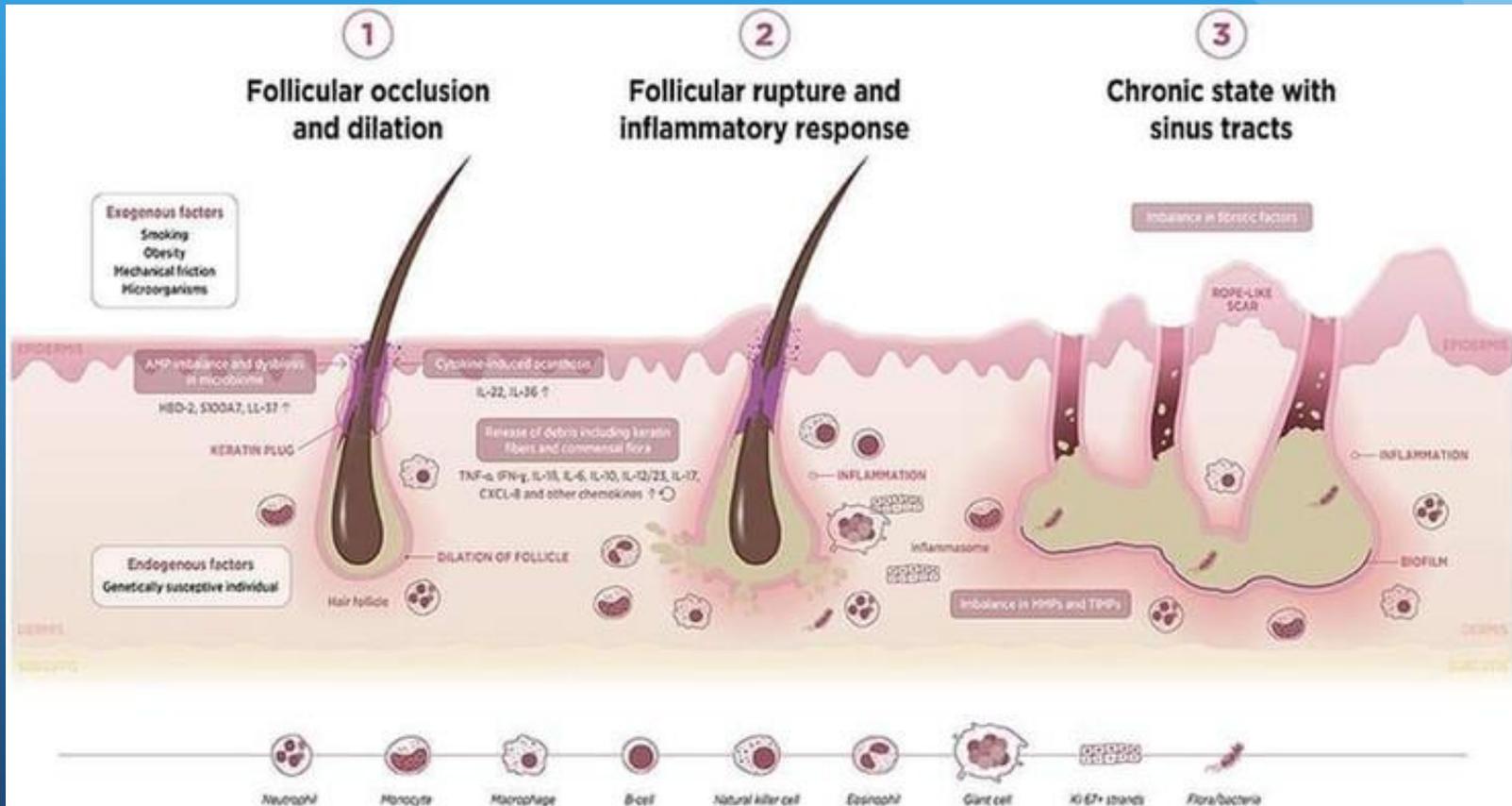
- A disease of hair follicles and apocrine glands
- Immune mediated but process is poorly understood
- IBD, psoriasis, spodyloarthritis
- Environmental factors
 - Mechanical
 - Obesity
 - Diabetes
 - Metabolic syndrome
 - smoking

Key Diagnostic Criteria



- Type of lesion
- Location of Lesion
- Chronicity/
Recurrence of
Lesions

Progression of HS



Hurley Stage I

Hurley Stage I
(Mild)



Typically presents as inflammatory nodule or abscess formation, single or multiple, without sinus tracts and scarring.¹

Abscess
formation
(single or
multiple)

Hurley Stage II

Hurley Stage II
(Moderate)



Typically presents as recurrent abscesses and nodules with sinus tract formation or scarring: single or multiple widely separated lesions.^{1,4}

Recurrent
abscesses with
tracts and scars

Hurley Stage III

Hurley Stage III
(Severe)



Typically presents as diffuse or near-diffuse involvement with multiple interconnected sinus tracts, scarring, and abscesses across entire area.^{1,4}

Multiple
interconnected
tracts
throughout the
area

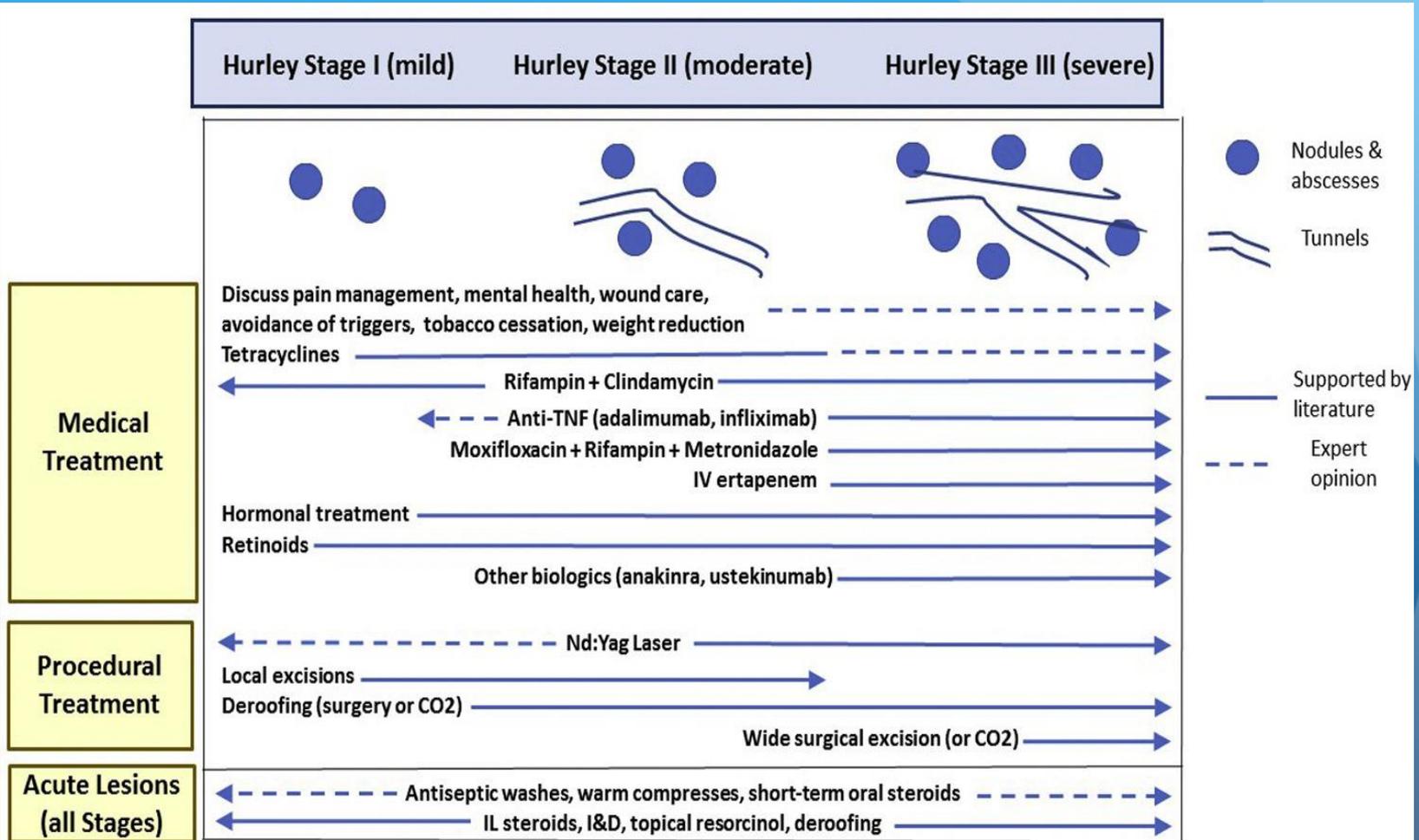
Treatment - Medication

- Topical Abx - Hurley I&II
 - Clindamycin 1% x 12 weeks
- Systemic Treatment
 - Tetracycline x 12 weeks
 - Clindamycin + rifampin x 10 weeks
 - Oral retinoids - 2nd or 3rd line
 - Oral steroids: potential benefit
- Anti-TNF agents: showing strong evidence of benefit

Treatment - Surgical

- Incision and drainage
 - great relief, ~100% recurrence rate
 - Excision of sinus tract improves outcome
- Wide excision w/reconstruction
 - Removal of apocrine glands in a region
- Laser Therapy:
 - Variable results but appears promising

Treatment by Stage



See additional Tables for details of each treatment. Other potential treatments are discussed in the text. HS management should be individualized for each patient and affected area; medical and physical therapies may be combined for optimal treatment; if lack of response, select treatment for more advanced disease.

Prognosis - HS



Early intervention leads to better results

Decisions about degree of intervention must include discussion of psychosocial impact

References

- [The epidemiology of hidradenitis suppurativa](#) Ingram, 2020
- [A qualitative analysis of psychological distress in hidradenitis suppurativa](#) Keary, 2019
- [Pathophysiology of hidradenitis suppurativa: An update](#) Prens 2015
- [New perspectives on the treatment of hidradenitis suppurativa](#) Amat-Samaranch, 2021
- [HS Treatment Guidelines](#)