The 7-year Itch and the 4 “Wh”s of Pruritis Ani

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Who gets the itch? Distribution of disease
Where does it itch? Anal canal anatomy
What makes it itch? Inciting factors/causes of pruritis
Why does it keep itching? Mechanisms & etiology of pruritis
How do you make it stop itching? Management approaches for treating pruritis

Who Gets The Itch?

The Distribution of Disease

Prevalence: 1-5% of the US population
Most common age at presentation: 40-60 years
Distribution by gender: men >> women

Why does the inside of your butt itch?
In: Health, Conditions and Diseases, Skin Disorders, Scabies

Answer:
The hamster is trying to get out
Where Does It Itch?

Sensory anatomy of the anal canal

Why Does It Itch (and keep itching)?

Etiology of Pruritis Ani

- Cutaneous (pruritoceptive) itch
  - Caused by inflammation of the skin

- Neuropathic itch
  - Caused by damage to the peripheral nervous system
  - Can be present anywhere along the afferent nerve pathway

- Neurogenic itch
  - The itch induced in the central nervous system

- Psychogenic itch
  - Caused by delusional states

Etiology & Pathophysiology of Pruritis
Mechanism of Pruritis: The Itch(y)-Scratch(y) Cycle

What Makes It Itch?
- Inflammatory
- Infectious
- Systemic
- Premalignant & malignant
- Anorectal

Secondary Causes of Pruritis
- History
  - Onset of itch
  - Timing of itch
  - Associated symptoms
  - Current therapy
- Bowel Habits
  - Stool texture
  - Effort at evacuation
  - Seepage
  - Cleaning up

Inflammatory Causes of Pruritis Ani
- Inflammatory Causes
  - Psoriasis “inverse psoriasis”
  - Eczema
  - Lichen Sclerosis

Lichen Sclerosis et Atrophicus
Psoriasis & Eczema

Secondary Causes of Pruritis Ani

Table 1: Causes of secondary pruritus ani

<table>
<thead>
<tr>
<th>Inflammatory Causes</th>
<th>Nonspecific Inflammatory Causes</th>
<th>Sexually Transmitted Diseases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psoriasis</td>
<td>Psoriasis-like Diseases</td>
<td>Sexually Transmitted Diseases</td>
</tr>
<tr>
<td>Eczema</td>
<td>Allergic Contact Dermatitis</td>
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<td>Lichen Sclerosis</td>
<td>Anorectal Lesions</td>
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Secondary Causes of Pruritis

- History
  - Onset of itch
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Secondary Causes of Pruritis

Infectious
- Non Sexually Transmitted
  - Tape worm
  - Candida
- Sexually Transmitted
  - HPV/Condyloma
  - HSV
  - Syphilis

Pre-Malignant
- AIN
- High Grade AIN (Bowen's Disease)

Malignant lesions
- Perianal Pagets

Anorectal Causes
- Hemorrhoids
- Rectal Prolapse
- Anal Fissure

Systemic Causes
- Uremia, liver disease
- Itching is non-specific

Final Common Pathway
- Itching
- Excoriations and ...
- More itching, scratching and excoriation

Excoriations
Primary Causes of Pruritis Ani

- **Primary causes**
  - Perineal soiling

- **Secondary causes**
  - Inflammatory
  - Infectious
  - Systemic
  - Premalignant/malignant
  - Anorectal pathology

Managing Pruritis Ani

- Optimize Stool Texture
  - Fiber & water supplementation
  - Stool should be bulky but soft & should clean up easily

- Keep Anoderm Clean & Dry
  - Wipe with moist cloth
  - Allow anoderm to dry
    - Hair dryer on cool setting
  - Zinc oxide barrier cream
  - Use a cotton ball/wick to absorb moisture
  - Benzoin & Subcutaneous injections
Treat Inflammatory Causes of Pruritis

Psoriasis/Eczema
- Treat with low to mid potency steroids for 4 weeks
- Wean off or switch to a non-steroidal topical treatment

Atopic Dermatitis
- Identify & stop the offending agent
- Treat with moisturizing agents, anti-inflammatory agents & anti-histamines

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Treat Infectious Causes of Pruritis

Non-Sexually Transmitted
- Candida: Topical and/or systemic anti-fungal agents
- Tape worm: Albendazole or mebendazole

Sexually Transmitted
- Chlamydia: doxycycline or azithromycin
- HPV removal/destruction; podophillin
- HSV: oral pain Rx; warm soaks; Acyclovir (BID v. TID)
- Abstinence during outbreak

Treat Premalignant & Malignant Causes of Pruritis

Pre Malignant Lesions
- Low grade dysplasia
  - Topical therapy
- High Grade dysplasia
  - Mapping/HRA
  - Punch biopsies/Excision

Malignant Lesions
- Search for underlying carcinoma
- Wide excision with frozen sections to assure clear margins

Treat Anorectal Causes of Pruritis

Hemorrhoids, Prolapse, Skin tags
- Enhance perianal hygiene
- Surgical excision of hemorrhoids
- Excise large skin tags
- Repair rectal prolapse

Anal Fissure
- Treat anal spasm
  - Nifedipine/NTG cream
  - Muscle relaxing suppositories
  - Botox injection
  - Lateral internal sphincterotomy
Pruritis Ani: Take Home Points

- There are multiple potential secondary causes of pruritis
- Etiology of itching could be skin, nervous system or psychogenic
- Effective therapy may be elusive without unless the diagnosis is accurate
- Look out for malignancy and Sexually Transmitted Infections
- Reassess after therapy is initiated
- In the absence of obvious secondary cause, therapy should aim to improve anal hygiene; remove common irritants; and keep anoderm clean and dry

Questions?

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