Vaginitis: Evaluation and Management

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Disclosures

- I have no funding to disclose.

- You referred the patients I treat...
Objectives

- Explore common diagnoses and management options beyond “banal exam” and negative wet mount findings in women presenting with vaginitis.
- Review options with practice limitations including microscopy and point of care testing.
 Typical New Patient

- 32 year old G2P2 with LMP 1 wk prior presents with “recurrent yeast” infections since delivery of her second child 2 years ago.
- Self medicates every 1-2 months with inconsistent relief of symptoms (OTC yeast remedies).
- If no relief, calls primary MD office; typically a treatment is prescribed without an office visit.
- Frustrated, wonders if her partner (husband) should be treated...
The phone is neither a diagnostic nor a therapeutic tool....
Accurate diagnosis

- Traditionally considered “simple” for vulvovaginal complaints.
  - Thus, commonly managed by phone (office staff)
  - Patients often insist on this approach; decline office visit for a variety of reasons

- Diagnosis by telephone is only marginally better than random chance!!

- Women who self-treat with OTC (antifungal) are correct 1/3^{rd} of the time (despite history i.e.- recurrent).
YES, Vaginitis

- Represents half of all outpatient female visits
- Is the **most common** self referral complaint
- Accounts for 40% of all vulvovaginal problems

However...
Common causes of Chronic Vaginitis
(referral population- Nyirjesy 2006)

- 200 new patients to vulvar specialty clinic

- **Contact dermatitis** 42 (21%)
- Recurrent candidiasis 41 (21%)
- **Atrophic vaginitis** 29 (15%)
- Vulvar vestibulitis 25 (13%)
- **Lichen simplex or sclerosus** 22 (11%)
- Bacterial vaginosis 13 (6.5%)
Complexities of care “Down There”

Among “top 10” as reasons for seeking care from general practitioners

- Most common complaint = “yeast infection”
  - Typically self medicate prior to seeking care
  - Hygiene routine often deeply ingrained (by mothers)
    - Douching
    - Washing frequency
    - Products used (detergent, soaps, feminine hygiene products)

Education key to compliance with plan = TIME$$$

- Anatomy; rationale for treatment plan / products
Evaluation

History and Physical (of course) – NO PHONE DIAGNOSIS!!!

- pH testing
  - 3.8 to 4.5 during reproductive years
  - ≥ 4.7 pre-menarche and post-menopausal
- “Whiff test” 10% KOH (fishy = positive)
- Microscopy (Wet prep)
  - Saline
  - KOH
- Consider
  - cultures (candida and trichomonas)
  - Point-of Care tests for pH and amines, trichomonas
  - Biopsy
Microscopy vs POC

- pH (3.5 to 4.5)
- Whiff (KOH)
- Microscopy
  - Yeast (hyphae / buds)
  - Clue cells
  - Trichomonas
  - Background flora
    - rods vs cocci
  - Squamous cells (mature)
  - WBCs (vs squamous)
  - RBC, sperm, artifact

- pH
- Whiff
- POC
  - BV
  - Trichomonas
  - Candida albicans
  - Chlamydia
  - Gonorrhea

- Miss – atrophy, dermatoses, DIV
When to Biopsy

- Anytime you are unsure of the diagnosis!!
- The morphology of many dermatoses often appears different on genital skin.
- R/O cancer or dysplasia.
  - Presumed genital warts that fail to respond to 2-3 office treatments
  - Vulvar changes that do not respond to medical therapy (lichen sclerosus or lichen simplex)
  - Appearance is concerning for neoplasia
Disclaimer

- Limited “research” regarding vulvar vaginal disorders
  - Especially regarding treatment + outcomes

- Nothing “FDA” approved for treatment of specific disorders
  - Excluding infectious and atrophy
  - “Off label use”
Contact Dermatitis

- Vulvar **BURNING** / irritation / CC “yeast”
- Hygiene
  - **Irritants... #1**
  - Menstrual hygiene
  - Maybe bathing issues
  - Deeply ingrained / “no problems in past”
Irritant Updates 2013

- High Efficiency Washers (less water)
  - Especially with “PODs” (concentrated soap)
  - EVERY LOAD, EVERY TIME (coats washer/drier)

- Wipes
  - Not really clean if you’re not “wiping”… FALSE!!
    - Even “sensitive” & “baby” wipes
  - Mineral oil works great if sticky stool is a problem

- Partner soaps and body sprays

- My new motto: Only use products your grandmother could buy (not douches)
Clinical Signs

- Mild erythema, swelling, and scaling
- Marked erythema, fissures, skin thickening, erosions, ulcers

Margesson 2004
Contact

- **Diagnosis**
  - History and physical
  - Microscopy

- **Treatment**
  - Stop offending agent(s)!!
  - Soaks
  - Skin protection (Zinc, Vaseline)
  - Topical steroid OINTMENT
  - Education; consider “partner” products!
<table>
<thead>
<tr>
<th><strong>ALLERGENS</strong></th>
<th><strong>IRRITANTS</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Benzocaine (Vagisil)</td>
<td>Soaps/cleansers</td>
</tr>
<tr>
<td>Preservatives</td>
<td>Sweat, urine, feces</td>
</tr>
<tr>
<td>Neomycin</td>
<td>Creams (alcohol)</td>
</tr>
<tr>
<td>Latex condoms</td>
<td>Douches</td>
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<tr>
<td>Chlorhexadine (K-Y)</td>
<td>Medications – TCA, 5FU</td>
</tr>
<tr>
<td>Lanolin (A&amp;D ointment)</td>
<td>Spermicides</td>
</tr>
<tr>
<td>Perfume</td>
<td>Panty liners</td>
</tr>
<tr>
<td>Nail Polish</td>
<td>Wipes</td>
</tr>
</tbody>
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Candida and Allergy to Parabens
Treatment Contact Vulvitis

- Remove All Potential Irritants
- Baking Soda Soaks
- Daily Skin Protectant
  - Zinc oxide ointment / petroleum / Aquaphilic / Veg. oil / coconut oil
- Low to Medium Potency Steroid Ointment
  - Triamcinolone – nystatin (Mycolog II)
    - Triamcinolone (Kenalog)
    - Hydrocortisone butyrate (Locoid)
    - Hydrocortisone valerate (Westcort)
Lichen Simplex = Eczema

- Characterized by lichenified plaque with intense and unrelenting itching (+/- scaling)
  - Sleep disruption
- Occurs primarily in mid- to late adult life
- Up to 75% have history of atopic disease

- Diagnosis is clinical
Lichen Simplex Chronicus

- Ditto contact, but add:
  - Itching / Scratching
  - Need to break cycle (control nocturnal scratching)
    - Tricyclic antidepressant; e.g. amitriptyline
    - Antihistamine; e.g. hydroxyzine
  - Steroid
    - Systemic vs. Ointment
    - With or without antipuritic (scabicide)
      - Crotamiton (Eurax)
      - Pramoxine
Lichen Simplex Chronicus

Longstanding disease: thickened and leathery, excoriations from scratching.
Lichen Simplex Chronicus
Lichen Simplex Chronicus

- Remove All Irritants
- Baking Soda Soaks
- Daily Skin Protectant

- Low to Medium Potency Steroid
  - Triamcinolone (Kenalog) 0.1%
  - Valisone (Betamethasone) 0.1%
  - Crotamiton / Valisone
  - Hydrocortisone acetate / pramoxine 1% or 2.5%

- Antihistamine
- Amitriptyline
  - (low dose for night-time itching)
Atrophic Vaginitis

- Post-menopausal vaginitis most likely = atrophy

- ALSO following breast cancer treatment (Tamoxifen [less so], aromatase inhibitors)
Atrophic Vaginitis

- Up to 50% of all postmenopausal women will experience vulvovaginal irritation, soreness, dryness, lower urinary tract problems, and dyspareunia
  - Peri-menopausal women can also experience symptoms

- Up to 25% of women using systemic hormone therapy will experience urogenital atrophy despite improvement in other menopausal symptoms

ACOG Practice Bulletin 2008
Atrophic Vaginitis

- **Diagnosis**
  - Loss of vaginal rugae with smooth mucosa and variable inflammation.
  - Wet mount findings: immature oval and round epithelial cells with relatively large nuclei. *Lactobacilli* are usually lacking.
Atrophy
Atrophic Vaginitis

- **Differential Dx**
  - DIV (Desquamative Inflammatory Vaginitis)
  - Erosive Lichen Planus
    - Look for: Coexisting skin and oral lesions
  - Pemphagoid / Pemphagus
- **Dx:**
  - H&P, microscopy, +/- biopsy
  - I typically biopsy when initial treatment fails or if vaginal co-apptation is present
45 year old on aromatase inhibitor following lumpectomy for recurrent breast cancer
5 weeks after initiating local estrogen
Atrophic Vaginitis

- **Treatment**
  - **Estrogen**
    - 1/4 on systemic ET have vaginal atrophy
    - Reminder- Black box warning on ALL estrogen formulations!!
  - Comfort measures (moisturizers & lubricants)

- As women approach menopause, vulvar tissue becomes increasingly sensitive to irritants
  - Bohl 2005
Nyirjesy 2006 conclusions

- Broad range of conditions can cause vulvovaginal symptoms
- Most of the causes of chronic “vaginitis” in their referral population were noninfectious
- Patients with vulvovaginal conditions report a significant negative impact on social, work, and sexual quality of life; underscores the fact that these problems should NOT be trivialized
Key points: “Down There”

- Among “top 10” reasons for seeking care
- Underlying psycho-social concerns
  - Cancer, Sex, Monogamy, Normality
- Education and reassurance (aka time and $$$)
  - Need to establish realistic expectations
- Biopsy if in doubt