SESSION F4

The Lichens: Cases of Vulvar Itching, Burning and Pain
Andrea Prabhu, MD

Session Description:

Vulvar dystrophies will be reviewed during this presentation including lichen simplex chronicus, lichen sclerosus, and lichen planus. The symptoms of these conditions tend to overlap. Recognition of these skin changes is important for prompt diagnosis and successful treatment. Time permitting we will also review use of topical steroids in these conditions.

Learning Objectives:

Following my presentation, participants will be able to:
1. Recognize changes to the vulva with these dystrophies.
2. Discuss when a vulvar biopsy is appropriate for the diagnosis.
3. Describe basics of treatment with vulvar hygiene and safe use of topical steroids.
The Lichens: Cases of Vulvar Itching, Burning and Pain

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Overview

- Lichen Simplex Chronicus
- Lichen Sclerosus
- Lichen Planus
- Topical Steroids (time permitting)

Quiz: Question 1

A history of which of the following conditions is most likely to be obtained from a woman with vulvar lichen simplex chronicus?

A. Acne
B. Atopic disease
C. Candida infection
D. Obesity

Quiz: Question 2

The underlying basis for lichen sclerosus is most likely

- Infectious
- Autoimmune
- Hormonal
- Neoplastic

Quiz: Question 3

Lichen planus can affect the following place(s):

A. Vulva
B. Vagina
C. Mouth
D. Tear ducts
E. All of the above

I have no disclosures.
Case #1:

31 year old with chronic yeast infections who presents with insomnia
The intense desire to scratch the vulva keeps her awake most of the night
She then has pain from scratches on the vulva

Lichen Simplex Chronicus: Introduction

- Chronic eczematous disease
- 10-35% of vulvar complaints
- 65-75% of patients with h/o atopic disorders (hay fever, asthma, childhood eczema)
- This is the end stage response to some initial insult (irritative, infectious)

Lichen Simplex Chronicus: Symptoms

- Itching
- Irritation
- Burning
- Pain
- Sleep disruption

Lichen Simplex Chronicus: Differential Diagnosis

- Candida vulvovaginitis
- Lichen sclerosus
- Lichen planus
- Contact/Irritant Dermatitis

Lichen Simplex Chronicus: Clinical Findings

- Skin thickening (*lichenification*)
- Erythema
- Scaling
- Inflammation
- Excoriations
- Erosions/ulcers from scratching
- Changes in pigmentation
- Hair loss
Lichen Simplex Chronicus: Treatment
- Biopsy is usually NOT needed unless patient fails treatment or if looking for other underlying diagnosis.
- Vulvar hygiene
- Removal of offending irritants
- Nails trimmed, cotton gloves
- Covered ice pack or cold washcloths
- Baking soda baths
- Antihistamines
- Topical steroids

Lichen Simplex Chronicus: Recurrence
- Can happen at any time if the inciting factors and/or habits recur.

Vulvar Hygiene
- CLOTHING
  - White, cotton underwear
  - Avoid pantyhose or consider removing middle insert
  - Avoid tight fitting or synthetic clothes
  - Remove wet clothes or swimsuits after working out
  - Consider “sensitive” laundry detergents
  - Consider underwear-only cycle with an additional water-only rinse cycle.
  - No dryer sheets or fabric softeners

- BATHING/HYGIENE
  - Avoid bath soaps, gels, lotions, perfumes
  - If you must use soap, Dove or Neutrogena preferred
  - No bubble baths, bath salts, oils
  - No washcloths on the vulva
  - Pat dry or use hair dryer on cool setting
  - NO DOUCHING
  - Baking soda baths for itching/burning.
    - 4-5 Tbsp baking soda in lukewarm bath water
  - Avoid deodorized pads and tampons (100% cotton)
  - NO SHAVING VULVAR AREA

- TOILETING HABITS
  - Consider A+D ointment to protect skin in cases of incontinence
  - White, unscented toilet paper
- SEXUAL HABITS
  - Lubricants: replens, slippery stuff, crisco, astroglide, lubrin, KY jelly, preseed, oils (coconut/olive)
  - Discuss contraceptive choices
Case #2:  
45 year old with vulvar burning with urination and dyspareunia

Lichen Sclerosus: Introduction
- **History**
  - 1887 Hallopeau described "atrophic form of lichen planus"

- **Other names**
  - Lichen sclerosus et atrophicus
  - Lichen albus
  - Kraurosis vulvae
  - Vulvar dystrophy
  - White spot disease
  - Guttate scleroderma
  - Leucoplakia
  - ISSVD favors “LICHEN SCLEROSUS”

Lichen Sclerosus: Demographics
- Any age but mean onset is 5th-6th decade

Lichen Sclerosus: Symptoms
- Asymptomatic
- Itching
- Burning
- Soreness
- Pain with intercourse
- Pain with bowel movements
- Bleeding from cracks in the skin
- Change in urinary stream
- 5-20% with extragenital lesions

Lichen Sclerosus: Differential Diagnosis
- Lichen planus
- Lichen simplex chronicus
- Candida vaginitis
- Squamous cell carcinoma of vulva
- Contact/irritant dermatitis
- Abuse
- Vitiligo
- Scar
- Radiation dermatitis
- Tinea versicolor
- Post-menopausal atrophy

Lichen Sclerosus: Clinical Findings
- White, fragile skin patches
  - Crinkled or shiny appearance
  - "parchment" or "cigarette" paper
  - "Figure of 8" hypopigmentation
  - Loss of labial architecture
  - "agglutination"
  - Phimosis of clitoral hood
  - Bruising
  - Excoriation
  - Reduced elasticity
  - Submucosal hemorrhage
  - Patches elsewhere on the body
  - "Koebner phenomenon"
Lichen Sclerosus: Treatment

Topical steroids (1st line)
- Ointments
  - 1 regimen: clobetasol propionate 0.05% qday – BID until normal texture then 2-3x/week for maintenance OR use of a midpotency steroid like 0.1% triamcinolone daily for control
- Moisturizers
- Vulvar hygiene
- Recommended skin checks every 6-12 months per ACOG
  - 4-5% risk of squamous cell carcinoma of the vulva

Corticosteroids are most effective!

Alternative treatments:
- Calcineurin inhibitors
  - Risk of skin cancer/lymphoma
- Tacrolimus
- Pimecrolimus
  - Compared to clobetasol less effective
- Oral retinoids
- Phototherapy

Testosterone
- Serum levels of dihydrotestosterone were decreased in patients with untreated vulvar LS
- Immunohistochemical stains showed loss of androgen receptors in LS
- 5 RCTs of 2% testosterone propionate and dihydrotestosterone 2% cream
  - Testosterone vs placebo: no difference
  - DHT vs placebo: no difference and no improvement in sx
  - Testosterone vs clobetasol: testosterone less effective
  - Testosterone vs DHT: no difference in efficacy
  - Testosterone vs placebo for maintenance therapy instead of clobetasol: testosterone worsened the symptoms
- Treatment has been abandoned for lack of evidence for effectiveness

“If my skin is thinning, then why should I use a steroid which puts me at risk for skin thinning?”

Lichen Sclerosus: Recurrence

Lifelong chronic medical condition
Can have flares of symptoms
In general, when well controlled should keep from progression and be (usually) asymptomatic

Trauma or infection (like Candida) can cause flares

Biopsy any new, ulcerated, eroded areas
Biopsy any areas not responding to treatment
Lichen Sclerosus: Prevention

- No prevention

Lichen Planus: Erosive

- Erosive, erythematous lesion originating in vestibule and extending up vaginal canal

Case #3:

- 50 yo woman complains of three years of increasing vulvar irritation, and intercourse is now too painful to try.
- On examination, several very red, painful, non-ulcerated areas are present in the introitus

Lichen Planus: Classic

- Sharply demarcated, flat topped plaques on oral and genital membranes

Lichen Planus: Introduction

- Inflammatory mucocutaneous disorder
- Thought to be due to T-cell mediated immunity
- More common around menopause
- Mean age of diagnosis: 50-60 oral disease, 40-45 cutaneous disease
- Fair skin, Northern European origin
- May involve vagina and vulva
- Rarely affects tear ducts, scalp, esophagus, nails
- Not infectious, not contagious
- Cause unknown
- Associated with other autoimmune conditions: vitiligo, thyroid disease, ulcerative colitis, alopecia areata
- Some association with hepatitis C virus so serologic testing should be considered.
Lichen Planus: Symptoms
- Asymptomatic
- Burning
- Soreness
- Asymptomatic
- Vaginal bleeding
- Dyspareunia
- Mouth bleeding/pain with eating
- Difficulty swallowing (in rare cases of esophageal stricture)
- Tearing abnormalities (in rare cases of tear duct pathology)

Lichen Planus: Differential Diagnosis
- Lichen sclerosus
- Lichen simplex chronicus
- Paget’s disease of the vulva
- Vulvar cancer

Lichen Planus: Clinical Findings
- Classic skin findings: flat-topped Purple, Polygonal, Papules
- White lacy area of gums – “Wickham’s striae”
- Shiny, red raw areas
- Labial scarring/agglutination
- Vaginal narrowing
- Vaginal erosions
- Scar bands in the vagina
- Wet mount: increased inflammatory cells, parabasal and basal epithelial cells

Lichen Planus: Treatment
- Oral steroids
  - Flucinonide, betamethasone, triamcinolone
- Vaginal steroids
- Topical vulvar/skin steroids
  - 1st line therapy
- GI referral
  - Balloon dilation of esophagus
- Ophthalmology referral
- Genital evaluation every 6-12 months
  - 1% incidence of squamous-cell carcinoma
- Vaginal dilation
- In severe cases may require systemic immunosuppression, phototherapy
Lichen Planus: Recurrence

- Lifelong chronic medical condition
- Goal is good control
- Can have flares

Lichen Planus: Prevention

- No way to prevent lichen planus

Overview

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- Lichen Sclerosus
- Lichen Planus
- Topical Steroids

Eliminate Inflammation: Steroids

- Use ointment on vulva
- No alcohol and adheres well
- Pea size amount is sufficient for thin layer
- Show where to apply and have patient demonstrate with exam gel
- Re-examine within 2-4 weeks
- Beware of dispensing large amounts, refills...
- Striae, atrophy, telangiectasia

Steroid Potency

<table>
<thead>
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<th>Class</th>
<th>Potency</th>
<th>Medication</th>
<th>Strength</th>
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<tr>
<td>I</td>
<td>super</td>
<td>Clobetasol propionate, Halobetasol</td>
<td>0.05%</td>
</tr>
<tr>
<td>II</td>
<td>high</td>
<td>Halcinonide</td>
<td>0.1%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Desoximetasone</td>
<td>0.2%</td>
</tr>
<tr>
<td>IV</td>
<td>moderate</td>
<td>Triamcinolone acetate, Betamethasone valerate</td>
<td>0.1%</td>
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<tr>
<td>VII</td>
<td>mild</td>
<td>Hydrocortisone</td>
<td>2.5%</td>
</tr>
</tbody>
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Steroid Use

- Limit amount and assess response
- Use for specific diagnosis or lesion
- Not a general anti-itch therapy
- Initial treatment is qday to BID
  - Monitor symptoms
  - Duration depends on response
  - Consider yeast if symptoms worsen
- Drop down to daily, then 2-3X/week
- Decrease to Class VII
- Maintenance 1-2X/week
Difficulties

- “More is better”
- “It worked, so I quit using it”
- Fear of steroids
  - Weight gain, diabetes, cancer
- Inability to get to area
  - Partner apply
  - Procto swabs
- Protect vulnerable areas with petrolatum

Steroid Side Effects

- Overuse: topical
  - Striae
  - Atrophy and thinning
  - Telangiectasia
  - Erythema
  - Superimposed yeast, bacteria
- Adrenal suppression
  - Oral systemic
  - Injections
  - Topical rare

Routes of Administration

- Ointments
- Creams
- Gels

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Resources

ISSVD.org
Patient handouts
Conferences
Lichensclerosus.org
Vaginismus.com

References

Vulvar Disorders. 4/2009. ACOG Clinical Updates in Women's Health Care.

Thank you!

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