Vulvovaginal Disorders

Hope K. Haefner, MD
Professor, Michigan Medicine
Ann Arbor, MI
May 30, 2019

Disclosures/Conflicts of Interest
Hope K. Haefner, MD

• Advisory Board Prestige Consumer Health Care, Inc.
Learning Objectives

At the conclusion of this activity, the participant should be able to:

1. Identify the clinical features of various vulvovaginal conditions
2. Learn tips on medical treatments for some frustrating vulvovaginal conditions
3. Become familiar with surgical procedures for vulvovaginal conditions

Additional Information

https://medicine.umich.edu/dept/obgyn/patient-care-services/womens-health-library/center-vulvar-diseases/resources-providers

or search Google for Resources for Providers University of Michigan
Make Your Selection

A  B

C  D

Test Format
The image shown represents which vulvar condition?
Test Format
The image shown represents which vulvar condition?

A. Erosive lichen planus
B. Paget disease
C. Eczematous dermatitis
D. None of the above

Beef Tongue
Question

A patient with vulvar/buttock whitening that is symmetric and has no loss of the labia minora most likely has:

A. Lichen sclerosus
B. Lichen planus
C. Vitiligo
D. Graft versus host disease
What is a lichen?

Lichen Sclerosus
Clinical Findings
Symptoms

• Often asymptomatic
• Most common symptom is pruritus
  – Can be severe, intolerable
  – Can interfere with sleep
  – Pruritus ani

Other Symptoms

• Burning
• Soreness
• Dysuria
• Dyspareunia
• Apareunia
• Pain with defecation
• Constipation (children)
Signs

- Hypopigmentation
- Ivory white papules or plaques
- Cigarette paper appearance
- Cellophane-like sheen to surface
- Hour glass-figure of eight appearance
- Patchy or generalized
  - Vulva, perineum, perianal
  - No vaginal involvement

Signs
Secondary Changes

- Fusion of labia minora
- Scratching yields open areas causing erosions
- Urinary retention
- Tearing
Cigarette Paper Appearance

Figure of Eight – Hour Glass
Office Procedures

Biopsy (4 mm)

Histopathology

Thinned epidermis +/- hyperkeratosis

Band of homogenized collagen

Lymphocytic infiltrate under the band
Treatment of Lichen Sclerosus

• Superpotent steroid ointment (clobetasol propionate 0.05%)
  – Twice daily in a thin, invisible film for 1 month then daily for two months
  – Maintain twice weekly Class 1 VERSUS
  – Decrease to Class IV steroid

Steroid Medications

Clobetasol propionate ointment 0.05%
Sig: apply to vulva bid x 1 month, then qd x 2 months Disp: 30 gms

Triamcinolone acetonide ointment 0.1%
Sig: apply to vulva qd to bid Disp: 80 gms

Consider decreasing gradually to triamcinolone acetonide ointment 0.025% qd to bid
Intralesional Triamcinolone


40 mg max on entire vulva

Intramuscular Triamcinolone

1 mg per kg (up to 80 mg max) into gluteus muscle
Surgical Treatment

- Limited role (high rate of recurrence)
- Surgical division of mucosal adhesions helpful in clitoral phimosis, introital narrowing
DO NOT DO THIS ON LICHEN PLANUS PATIENTS IN CLINIC!

Other Treatments for Lichen Sclerosus

- Hydrodissection with reverse V plasty technique
- Cryosurgery
- Ultrasound therapy
- Use of split thickness skin grafts or full thickness skin grafts
- Release of urethral strictures (oral mucosa grafts)
- Use of acellular human dermal allograft
- Role of adipose derived mesenchymal cells and platelet rich plasma in tissue regeneration
- Stem cell lift
Other Treatments for Lichen Sclerosus

- Hydrodissection with reverse V plasty technique
- Cryosurgery
- Ultrasound therapy
- Use of split thickness skin grafts or full thickness skin grafts
- Release of urethral strictures (oral mucosa grafts)
- Use of acellular human dermal allograft
- Role of adipose derived mesenchymal cells and platelet rich plasma in tissue regeneration
- Stem cell lift

Erosive Lichen Planus
Signs and Symptoms of Lichen Planus

**Signs**
- Lacy pattern (Wickham’s striae)
- Erosions
- Vaginal scarring (complete closure at times)
- Loss of labia minora
- Esophageal strictures

**Symptoms**
- Dyspareunia
- Apareunia
- Pruritus
- Rawness
- Burning

**Question**

Erosive lichen planus can occur in the

- **A.** Ear
- **B.** Esophagus
- **C.** Mouth
- **D.** All of the above
Lichen Planus (LP) Treatments

- Topical steroid ointments/tacrolimus
- Methotrexate, hydroxychloroquine, cyclosporine, cyclophosphamide, azathioprine, etanercept, mycophenolate mofetil
- Surgery for lichen planus (lysis of vulvovaginal adhesions) consists of opening the vagina under anesthesia, followed by long term vaginal dilation and intravaginal steroids
Lichen Planus (LP) Treatments

• Topical steroid ointments/tacrolimus
• Methotrexate, hydroxychloroquine, cyclosporine, cyclophosphamide, azathioprine, etanercept, mycophenolate mofetil
• Surgery for lichen planus (lysis of vulvovaginal adhesions) consists of opening the vagina under anesthesia, followed by long term vaginal dilation and intravaginal steroids
What is this?

A. Pool noodle
B. Backer rod for building houses
C. Speedway Motors Racer's Crash Repair Kit
Soft Type Backer Rods

- Ideal for irregular joints, particularly where free flowing and self leveling sealants are employed
- Google
Video Available


Lysis of Vulvovaginal Adhesions in Lichen Planus

- Surgical lysis of adhesions
  - Goal
    • Improve urine flow, decrease risk of UTI
    • Allow intercourse, reduce dyspareunia
  - Best if disease controlled (koebnerization)
  - Results
    N=22, 11 patients who underwent surgery for vulvovaginal adhesions and 11 age matched controls
    • 6 months to 6 years post-lysis of adhesions
    • 91% satisfied with procedure
    • 75% of patients with decreased urinary difficulties
    • 55% able to have intercourse
    • 50% continued to fear pain
  - Post op dilator 48-72 hours, long term dilation and steroids

### Postoperative management recommendations

<table>
<thead>
<tr>
<th>Intervention</th>
<th>Dosing</th>
<th>Timing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intrarectal corticosteroids</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hydrocortisone 100 mg/g in enema cream base</td>
<td>300 mg (1 g) per rectum QHS</td>
<td>First week postoperatively</td>
</tr>
<tr>
<td></td>
<td>400 mg (1 g) per rectum QHS</td>
<td>Second week postoperatively</td>
</tr>
<tr>
<td></td>
<td>500 mg (1 g) per rectum QHS</td>
<td>Third week postoperatively</td>
</tr>
<tr>
<td></td>
<td>400 mg (1 g) per rectum QHS</td>
<td>Fourth week postoperatively</td>
</tr>
<tr>
<td></td>
<td>300 mg (1 g) per rectum QHS</td>
<td>Fifth week postoperatively</td>
</tr>
<tr>
<td></td>
<td>200 mg (1 g) per rectum QHS</td>
<td>Sixth week postoperatively</td>
</tr>
<tr>
<td></td>
<td>100 mg (1 g) per rectum QHS</td>
<td>Starting week 7, indefinitely*</td>
</tr>
<tr>
<td>Dilator*</td>
<td>Largest size tolerated</td>
<td>QHS for 20–25 min for 6 cm with silicone lubricant, then consider daily dilation with a water soluble lubricant in the shower (dilator placed into vagina and immediately removed to prevent adherence formation)</td>
</tr>
</tbody>
</table>

* Depending on disease activity, patients may eventually decrease to 100 mg hydrocortisone suppositories nightly per rectum and then 50 mg hydrocortisone suppositories nightly per rectum. The long-term goal is to utilize hydrocortisone suppositories 2–3 times per week. Any medical-grade dilator set is acceptable.

*Hydrocortisone Acetate 5 mg Suppository*

0110305747090121
Manufactured by Perigal®

*Hydrocortisone Acetate 25 mg Suppository*

0110305747090121
Manufactured by Perigal®
Medical-Grade Vaginal Dilators
## Lubricants

<table>
<thead>
<tr>
<th>Water Based</th>
<th>Silicone based</th>
<th>Hypoallergenic</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Astroglide</td>
<td>• Astroglide X</td>
<td>• Good Clean Love</td>
</tr>
<tr>
<td>• Astroglide Gel Just Like Me</td>
<td>• Gun Oil</td>
<td>• Just like Me</td>
</tr>
<tr>
<td>• Astroglide Silken Secret</td>
<td>• ID Millennium</td>
<td></td>
</tr>
<tr>
<td>• K-Y Liquid Personal</td>
<td>• Jo Premium</td>
<td></td>
</tr>
<tr>
<td>• K-Y SILK-E</td>
<td>• K-Y Intrigue</td>
<td></td>
</tr>
<tr>
<td>• K-Y Ultra Gel</td>
<td>• Lubrin (Suppository)</td>
<td></td>
</tr>
<tr>
<td>• Liquid Silk</td>
<td>• Pink Silicone</td>
<td></td>
</tr>
<tr>
<td>• Me Again</td>
<td>• Pjur silicone</td>
<td></td>
</tr>
<tr>
<td>• Pink Water</td>
<td>• Sliquid Silver</td>
<td></td>
</tr>
<tr>
<td>• Pjur Water Based</td>
<td>• Wet Platinum Premium Lubricant</td>
<td></td>
</tr>
<tr>
<td>• Pre-Seed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Probe</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Slippery Stuff Gel</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Sliquid H2O</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Sweet seduction</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• System Jo H20</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## Vestibulodynia and Vestibulectomy
Vestibulodynia
Important Thoughts Prior to Surgery

• Failed treatment algorithm
• Rule out vaginismus
• Determine area to excise
• Undermining posterior and lateral vaginal walls
Hart’s line
Classic Closure Technique
V to Y Flaps
V-to-Y Flap

V-to-Y Flap
Double V-Y Flaps
Double V-Y Plasty

Start the closure by suturing the two straight margins together in the center the defect using simple interrupted sutures.
**Double V-Y Plasty**

Place sutures on both ends of the newly joined central island

![Diagram of Double V-Y Plasty](image1)

**Double V-Y Plasty**

Place two additional corner sutures at the tips of the triangular flaps and use simple interrupted sutures to finish closing the incisions

![Diagram of Double V-Y Plasty](image2)
A 45 y.o. G2P1 presents with complaints of vulvar pruritus. It awakens her at night. A yeast culture was negative. She has been intermittently treated without success with Class 1 topical steroids for over a year.
Your Diagnosis Is?

A. High grade squamous intraepithelial lesion  
B. Herpes  
C. Lichen simplex chronicus  
D. Lichen sclerosus
These Statements are True about LSC except:

A. It is often secondarily infected
B. It is associated with HIV
C. It commonly reoccurs
D. It is associated with atopy, psoriasis, and contact dermatitis
For Severe Itch–Scratch Cycle

Oral steroids (short term)
Cefadroxil 500 mg po bid x 7 days
Amitriptyline for a week or 2 (25 mg, increase to 50 mg if needed) vs.
Hydroxyzine (25 to 50 mg po qd to qid prn)
White cotton gloves

Subcutaneous Steroid Injections

Intramuscular Steroid Injections

- Triamcinolone acetonide intramuscular
- 1 mg/kg up to 80 mg IM
- This can be repeated monthly up to 3 total doses to get a severe condition under control

A 86 year old woman complains of vulvar soreness and itching that has recurred in the last year.

CHF, recent stroke, DVT

She thinks she had a problem like this 10 years ago but has no records. Topical steroids had made no difference.

A biopsy is performed.
Your Diagnosis Is?

A. Lichen sclerosus
B. VIN differentiated
C. Lichen planus
D. Extramammary Paget’s

Recurrent Paget’s Disease
Which treatment do you **not** recommend for her recurrent Paget’s?

A. Triamcinolone ointment  
B. Laser therapy  
C. 5% imiquimod cream  
D. Wide local excision
What is the rate of primary Paget’s disease of the vulva being associated with an underlying adenocarcinoma?

A. 1% to 25%
B. 26% to 50%
C. 51% to 75%
D. 76% to 100%
Surgery for Primary Paget’s

Summary