Vulvar Diagnosis and Treatment

Dermatoses: Lichen Sclerosus, Lichen Planus, Lichen Simplex Chronicus, Melanosis and Melanoma

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Learning Objectives

At the end of this presentation the participant will:

1. Understand the various vulvar dermatoses that cause vulvar pruritus
2. Identify and treat lichen sclerosus, lichen simplex chronicus, and lichen planus
3. Develop a plan for caring for patients with the itch scratch cycle
4. Understand melanosis to melanoma diagnosis
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Lichen sclerosus
Lichen planus
Lichen simplex chronicus
Vulvar Inflammatory Dermatoses: An Update and Review

Mai P. Hoang, MD,* Jason Reuter, MD,† John A. Papalas, MD,‡ Libby Edwards, MD,§ and Maria A. Selim, MD¶

Abstract: Currently, urogenital complaints are among the most common problems encountered by family practitioners, gynecologists, and dermatologists. In response to the intricacy of vulvar disorders, the International Society for the Study of Vulvovaginal Disease was created to facilitate the exchange between clinicians and pathologists involved in the care of these patients. Recent classifications for inflammatory disorders and intraepithelial neoplasm have been proposed. In addition, vulvar skin biopsies are the most common source of intradepartmental consultation during dermatopathology sign-out. The purpose of this article is to review the various inflammatory dermatoses of the vulva and to update readers with new advances regarding these entities.

Key Words: vulva, inflammatory dermatoses, ISSVD

(Am J Dermatopathol 2014;36:689–704)
Lichen Sclerosus
Introduction

• Common chronic vulvar disease
• Inflammation present
• Age range from childhood to elderly (bimodal distribution)
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
Cigarette Paper Appearance
Figure of Eight – Hour Glass
Loss of Labia Minora
Lichen Sclerosus and Vitiligo
Office Procedures

Biopsy (4 mm)
Histopathology

Thinned epidermis +/- hyperkeratosis

Band of homogenized collagen

Lymphocytic infiltrate under the band
Extragenital Involvement

- Neck
- Shoulders
- Axillae
- Under breasts
- Flexor aspects of wrists
- Scalp
- Palms
- Soles
- Acrochordons
Extragenital Involvement
Treatment of Lichen Sclerosus

- Thorough assessment
- Biopsy to verify diagnosis or rule out cancer
- Treat secondary infection (particularly yeast)
- Check thyroid function
Lichen Sclerosus Treatments

General Care Measures

- Bland emollients
- 100% cotton underwear
- Avoid tight, occlusive clothing
- No soaps to the vulva
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
Tacrolimus

0.1% ointment
Apply to skin bid to qd
Intralesional or Intramuscular Triamcinolone
Intralesional Injections

Bupivacaine (0.25% or 0.5%) and Triamcinolone acetonide

Draw up Triamcinolone acetonide first (10 mg/cc vs 40 mg/cc) (can use up to 40 mg steroid in single dose per month) HOWEVER NEED TO ASSESS AREA

Combine with Bupivacaine (large area use 0.25%; small area use 0.5%)

Can be repeated monthly
Injections

Intramuscular triamcinolone acetonide

1 mg per kg up to 80 mg into gluteus muscle

Can be repeated monthly up to 3 or 4 times
Steroid Medications

- Oral steroids
  - Prednisolone
  - Prednisone
  - Methyl prednisolone
- Rarely required
- Significant side effects
Less Common Treatments
Systemic Therapy

• Retinoids
• Potassium para-aminobenzoate (Potoba®)
  - Inhibition of glycosaminoglycan secretion by skin fibroblasts
• Antimalarial agents (chloroquine)
  - Oral or intralesional
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!
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 to 4 total doses to get a severe condition under control
Lichen Planus

• Autoimmune

• Histology and morphology resemble other hyperimmune conditions (GVH, lichenoid drug eruption)

• More difficult to treat than LS; may respond to immunosuppressive therapy
Lichen Planus

- On keratinized skin, pruritic papule
- Vulva, vagina and mouth-often erosive disease
Lichen Planus

• Symptoms
  – Pruritus
  – Irritation
  – Rawness
  – Burning
  – Dyspareunia
  – Apareunia
Erosive Lichen Planus
Lichen Planus

• Diagnosis
  – Biopsy when indicated; often nonspecific
  – Biopsy white epithelium; otherwise the edge of an erosion
  – Consider immunofluorescent study
Lichen Planus

• Treatment
  – Intravaginal dilator
  – Topical corticosteroids
    • Hydrocortisone acetate suppositories 25 to 50 mg per vagina qhs
      or
    • Clobetasol 0.05% ointment inserted per vagina
      Taper
Tacrolimus

0.1% ointment
Apply bid to skin to qd
Lichen Planus
Other treatments

- Anti-inflammatory antibiotics
- Misoprostol
- Hydroxychloroquine (Plaquenil)
- Retinoids
- Cyclosporine

- Cyclophosphamide
- Azathioprine
- Etanercept (Enbrel)
- Mycophenolate mofetil (CellCept)
- Methotrexate
Soft Type Backer Rods

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

Hydrocortisone Acetate 25 mg Suppository
(01)10305747090121
Manufactured by Perrigo®

Hydrocortisone Acetate 25 mg Suppository
(01)10305747090121
Manufactured by Perrigo®
<table>
<thead>
<tr>
<th>Intervention</th>
<th>Dosing</th>
<th>Timing</th>
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<tr>
<td>Intravaginal corticosteroids</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hydrocortisone 100 mg/g in emollient cream base</td>
<td>300 mg (3 g) per vagina QHS</td>
<td>First week postoperatively</td>
</tr>
<tr>
<td></td>
<td>400 mg (4 g) per vagina QHS</td>
<td>Second week postoperatively</td>
</tr>
<tr>
<td></td>
<td>500 mg (5 g) per vagina QHS</td>
<td>Third week postoperatively</td>
</tr>
<tr>
<td></td>
<td>400 mg (4 g) per vagina QHS</td>
<td>Fourth week postoperatively</td>
</tr>
<tr>
<td></td>
<td>300 mg (3 g) per vagina QHS</td>
<td>Fifth week postoperatively</td>
</tr>
<tr>
<td></td>
<td>200 mg (2 g) per vagina QHS</td>
<td>Sixth week postoperatively</td>
</tr>
<tr>
<td></td>
<td>100 mg (1 g) per vagina QHS</td>
<td>Starting week 7, indefinitely(^a)</td>
</tr>
<tr>
<td>Dilators(^b)</td>
<td>Largest size tolerated</td>
<td>QHS for 20–25 min for 6 mo (with silicone lubricant), then consider daily dilation with a water soluble lubricant in the shower (dilator placed into vagina and immediately removed to prevent adhesion formation)</td>
</tr>
</tbody>
</table>

\(^a\) Depending on disease activity, patients may eventually decrease to 50 mg hydrocortisone suppositories nightly per vagina if tolerated and then 25 mg hydrocortisone suppositories nightly per vagina. The long-term goal is to utilize hydrocortisone suppositories 2–3 times per week; \(^b\) Any medical-grade dilator set is acceptable.

Medical-Grade Vaginal Dilators
Other Treatments Lichen Planus (and 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
# Lubricants

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<tr>
<th>Water Based</th>
<th>Silicone based</th>
<th>Hypoallergenic</th>
</tr>
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<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>
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<tr>
<td>• Pre-Seed</td>
<td></td>
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<tr>
<td>• Probe</td>
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<tr>
<td>• Slippery Stuff Gel</td>
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<td>• Sliquid H20</td>
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<td>• Sweet seduction</td>
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<td>• System Jo H20</td>
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Moisturizers

- Extra Virgin Olive Oil
- Vitamin E oil
- Coconut Oil
- Luvena
- Replens
- Moist Again
- KY Silk-E
- K-Y liquibeads
Lichen Sclerosis and Lichen Planus

? Overlap
Vulvar Melanoma

- Rare (<0.2 per 100,000 women)
- Paucity of data in the literature
- Management within a multidisciplinary team including a gynecologic oncologist, surgeon, oncologist, dermatologist, plastic surgeon...
Vulvar Melanoma

- Second most common vulvar malignancy after squamous cell cancer
- Most commonly found on the labia majora
- Five year survival rates are reported as 8 – 55%
- Primary management is surgery
- Wide local excision
- Surgical radicality does not appear to have a significant impact on overall survival
- Poor response to chemotherapy and radiotherapy
Prognostic Factors

• AJCC staging system (tumor thickness, mitotic rate, ulceration, nodal involvement)
• Advancing age, worse prognosis
• Women have more favorable prognostic factors than men
National Comprehensive Cancer Network (NCCN) Guidelines

- Version 1.2017

NCCN.org
Summary

• Vulvar dermatoses
  – Identify and treat lichen sclerosus, lichen simplex chronicus, and lichen planus

• Understand melanosis to melanoma of the vulva