The Latest in Vulvar Dermatoses

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Disclosures/Conflicts of Interest

• I have no financial relationships to disclose related to this topic

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
The 2006 and 2011 International Society for the Study of Vulvovaginal Disease Classifications of Vulvar Dermatoses


<table>
<thead>
<tr>
<th>Skin-colored lesions</th>
<th>Spongiotic pattern</th>
</tr>
</thead>
<tbody>
<tr>
<td>Red lesions: patches and plaques</td>
<td>Acanthotic pattern</td>
</tr>
<tr>
<td>Red lesions: papules and nodules</td>
<td>Lichenoid pattern</td>
</tr>
<tr>
<td>White lesions</td>
<td>Dermal homogenization/sclerosis pattern</td>
</tr>
<tr>
<td>Dark colored (brown, blue, gray, or black) lesions</td>
<td>Vesiculobullous pattern</td>
</tr>
<tr>
<td>Blisters</td>
<td>Acantholytic pattern</td>
</tr>
<tr>
<td>Erosions and ulcers</td>
<td>Granulomatous pattern</td>
</tr>
<tr>
<td>Edema (diffuse genital swelling)</td>
<td>Vasculopathic pattern</td>
</tr>
</tbody>
</table>

2006 ISSVD Classification of Vulvar Dermatoses: Pathologic Subsets

- Spongiotic pattern
- Acanthotic pattern
- Lichenoid pattern
- Dermal homegenization/sclerosis pattern
- Vesiculobullous pattern
- Acantholytic pattern
- Granulomatous pattern
- Vasculopathic pattern
2006 ISSVD Classification of Vulvar Dermatoses: Pathologic Subsets

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Contact dermatitis

Psoriasis
Amicrobial pustulosis of the folds
Reiter syndrome
2006 ISSVD Classification of Vulvar Dermatoses: Pathologic Subsets

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Lichen sclerosus
Lichen planus

Papular genitocrural acantholysis
Hailey–Hailey disease
Darier disease
Epidermolytic hyperkeratosis of the vulva
Pemphigus vulgaris and pemphigus erythematosus
Bullous pemphigoid and cicatricial pemphigoid
Linear IgA disease
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Metastatic Crohn disease to the vulva

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Behcet disease Plasma cell vulvitis (Zoon vulvitis)
CME ARTICLE

Vulvar Inflammatory Dermatoses: An Update and Review

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

Abstract: Currently, anogenital 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 neoplasms have been proposed. In addition, vulvar skin biopsies are the most common source of interdepartmental consultation during dermatopathology sign-out. The purpose of this article is to review the various inflammatory dermatoses of the vulva to update readers with new advances regarding these entities.

Key Words vulva, inflammatory dermatoses, ISSVD

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45 Minutes

• Contact dermatitis
• Lichen sclerosus
• Lichen planus
• Lichen simplex chronicus
Contact Dermatitis
Urinary Incontinence

Contact Dermatitis
Steroid Overuse
Contact Dermatitis

**Primary irritant contact dermatitis** results from prolonged or repeated exposure to a caustic or physically irritating agent (e.g. urine, feces, soap residue)

1. Over-washing
2. Use of creams with drying bases
3. Wetness (urine, feces, menstruation)

**Allergic contact dermatitis** (e.g. poison ivy, neomycin or benzocaine). This is a type IV delayed hypersensitivity reaction (1-2 days).

Contact Dermatitis Treatment

- Antibiotics are needed for secondary infection – see lichen simplex chronicus above
- If very severe, prednisone 1 mg/kg decreasing over 14 – 21 days or 1 dose of triamcinolone acetonide IM 1 mg/kg (anterior thigh) (do not exceed 80 mg total IM)
- Caution in patients with diabetes- high dose steroids can interfere with their glucose control
Treatment of Contact Dermatitis

- Stop the irritant or allergen exposure
- Topical corticosteroids – clobetasol 0.05% or halobetasol 0.05% ointment bid x 5-7 days, then daily x 5-7 days (avoid long term use)
- Bland emollients such as petrolatum or mineral oil and nighttime use sedation for sleeping

- Antibiotics are needed for secondary infection – see lichen simplex chronicus above
- If very severe, oral prednisone decreasing over 14 – 21 days or 1 dose of triamcinolone acetonide IM 1 mg/kg (gluteus muscle) (do not exceed 80 mg total IM)
- Caution in patients with diabetes - high dose steroids can interfere with their glucose control
What is a lichen?

Lichen Sclerosus
Introduction

- Common chronic vulvar disease
- Inflammation present
- Age range from childhood to elderly (bimodal distribution)
Location of Lichen Sclerosus on the Vulva and Adjacent Areas

- Labia: 100%
- Clitoris: 70.4%
- Perineum: 67.9%
- Buttocks: 32.3%
- Perianus: 32.1%
- Crural area: 8.6%
- Urethra: 3.7%

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
Whitening Fusion

Clitoral Changes
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
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!
Prepuce Cyst and Lichen Sclerosus
2015 ISSVD Terminology of Vulvar Squamous Intraepithelial Lesions

- Low grade squamous intraepithelial lesion (Flat condyloma or HPV effect)
- High grade squamous intraepithelial lesion (VIN usual type)
- Intraepithelial neoplasia, differentiated-type

Lichen Sclerosus and VIN Differentiated V-to-Y Flaps
V-to-Y Flaps

V-to-Y Flaps
V-to-Y Flaps
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.
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.
Atarax (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
Very Early 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
Lichen Planus

• Signs
  – Non-erosive (often extremities)
  – Erosive
    • Changes on mouth and vulva and vagina

Non-erosive LP
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

Postoperative management recommendations

<table>
<thead>
<tr>
<th>Intervention</th>
<th>Dosing</th>
<th>Timing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrocortisone 100 mg/g in emollient cream base</td>
<td>300 mg (g) per vagina QHS</td>
<td>First week postoperatively</td>
</tr>
<tr>
<td>400 mg (g) per vagina QHS</td>
<td>Second week postoperatively</td>
<td></td>
</tr>
<tr>
<td>500 mg (g) per vagina QHS</td>
<td>Third week postoperatively</td>
<td></td>
</tr>
<tr>
<td>400 mg (g) per vagina QHS</td>
<td>Fourth week postoperatively</td>
<td></td>
</tr>
<tr>
<td>300 mg (g) per vagina QHS</td>
<td>Fifth week postoperatively</td>
<td></td>
</tr>
<tr>
<td>200 mg (g) per vagina QHS</td>
<td>Sixth week postoperatively</td>
<td></td>
</tr>
<tr>
<td>100 mg (g) per vagina QHS</td>
<td>Starting week 7, indefinitely*</td>
<td></td>
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</tbody>
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* Depending on disease activity, patients may eventually decrease to 50 mg hydrocortisone suppositories nightly per vagina if tolerated and have 0-1 mg hydrocortisone suppositories nightly per vagina. The long-term goal is to utilize hydrocortisone suppositories 0-1 time per week. A medical-grade dilator set is acceptable.

Dilators

- Largest size tolerated
- QHS for 20–30 min for 6 mg (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).
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
We-Vibe

Lubricants

**Water Based**
- Astroglide
- Astroglide Gel Just Like Me
- Astroglide Silken Secret
- K-Y Liquid Personal
- K-Y SILK·E
- K-Y Ultra Gel
- Liquid Silk
- Me Again
- Pink Water
- Pjur Water Based
- Pre-Seed
- Probe
- Slippery Stuff Gel
- Sliquid H20
- Sweet seduction
- System Jo H20

**Silicone based**
- Astroglide X
- Gun Oil
- ID Millennium
- Jo Premium
- K-Y Intrigue
- Lubrin (Suppository)
- Pink Silicone
- Pjur silicone
- Sliquid Silver
- Wet Platinum Premium Lubricant

**Hypoallergenic**
- Good Clean Love
- Just like Me
## Moisturizers

<table>
<thead>
<tr>
<th>Extra Virgin Olive Oil</th>
<th>Luvena</th>
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<tbody>
<tr>
<td>Vitamin E oil</td>
<td>Replens</td>
</tr>
<tr>
<td>Coconut Oil</td>
<td>Moist Again</td>
</tr>
<tr>
<td></td>
<td>KY Silk-E</td>
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<tr>
<td></td>
<td>K-Y liquibeads</td>
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</table>
Lichen Sclerosus
Lichen Planus

Topical estrogen cream useful in menopausal women
Lichen Sclerosus
Lichen Planus and Vulvar Pain

Tricyclic antidepressants
Anticonvulsants
Physical Therapy
Sexual counseling