

Genital Dermatology



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Disclosure



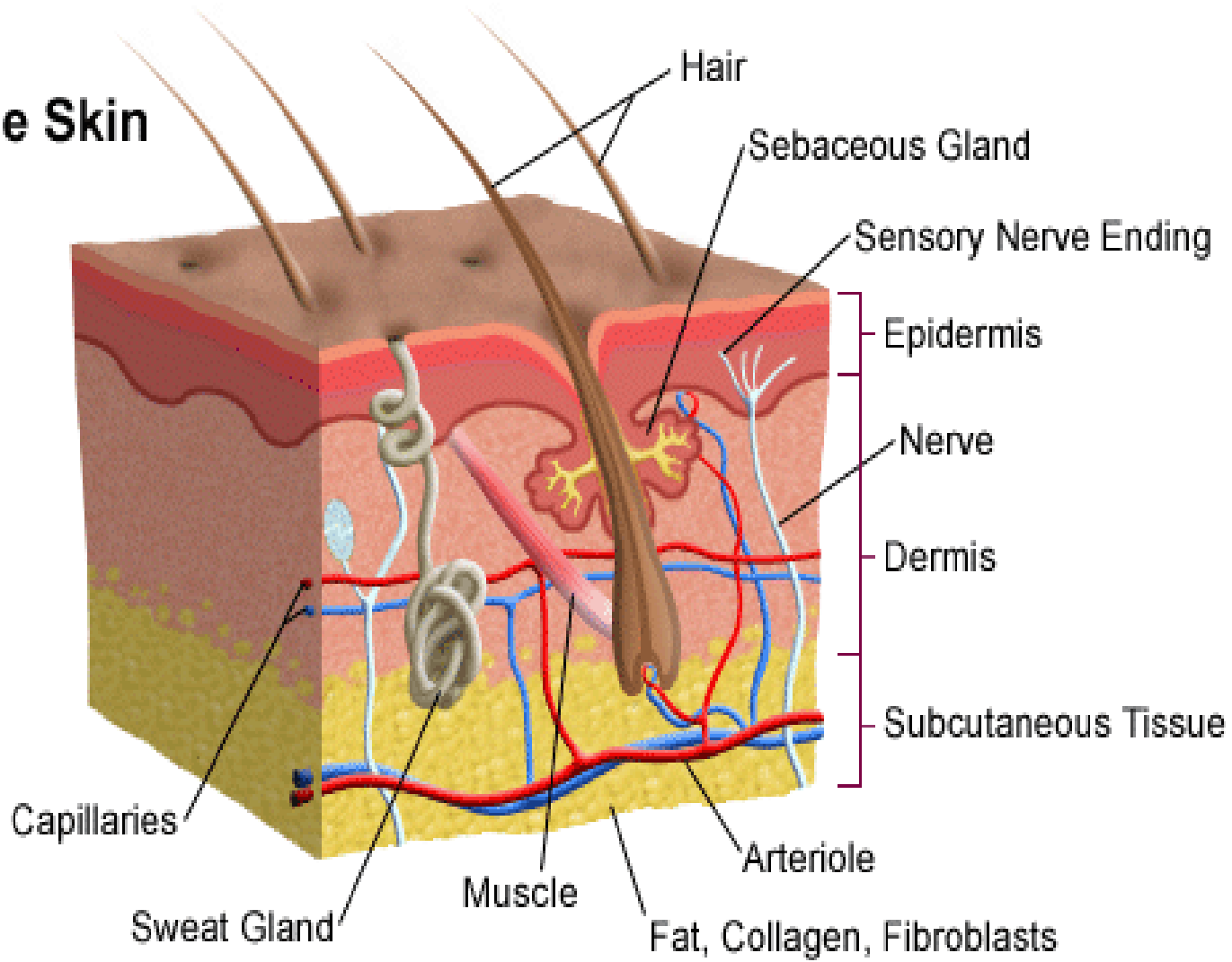
∞ No conflicts of interest

Objectives



- ❧ Identify common genital dermatological conditions.
- ❧ List appropriate diagnostic approaches to common genital dermatological conditions.
- ❧ Describe appropriate management of common genital dermatologic disorders.
- ❧ Demonstrate good local anesthetic perfusion technique.
- ❧ Perform a skin biopsy with skill and precision.
- ❧ Perform basic interrupted suture insertion.

The Skin



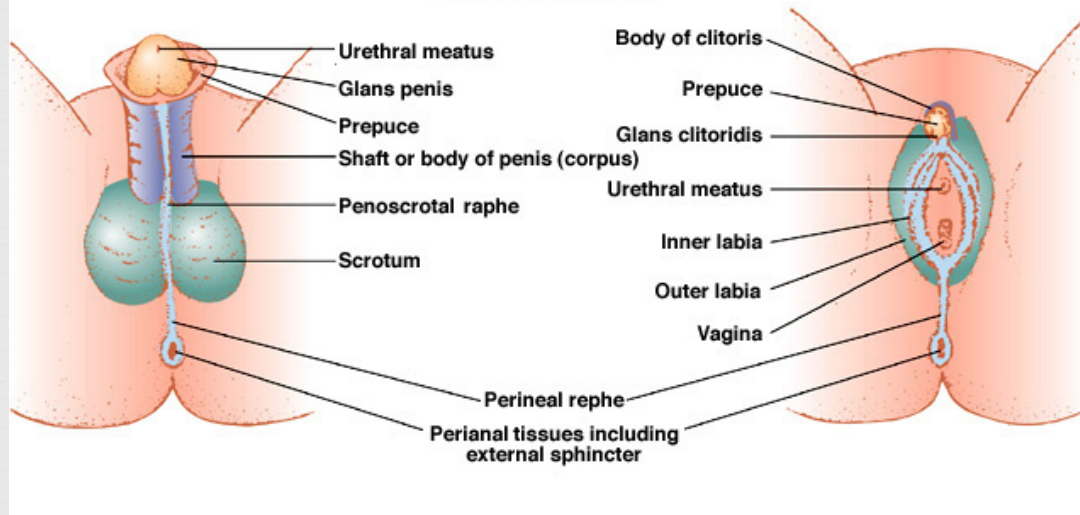
Comparative Anatomy



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Development of M/F External Genitals

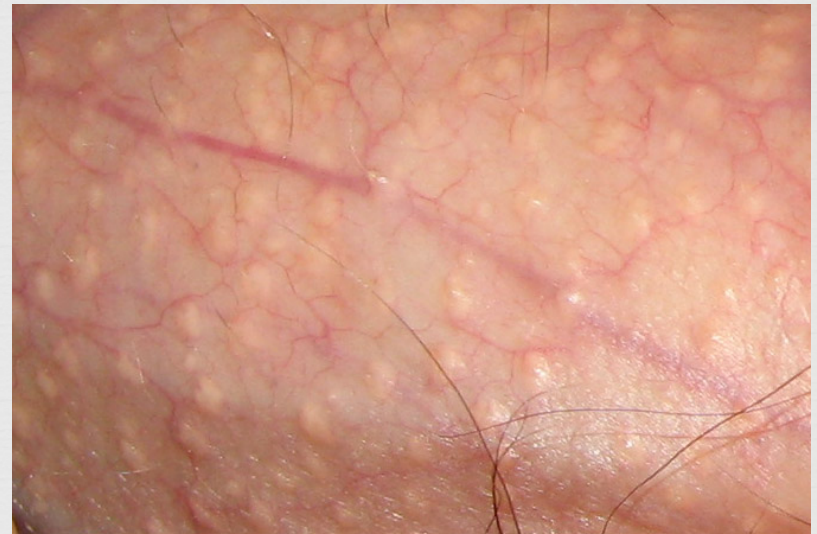
FULLY DEVELOPED



Variants of Normal



Vulva



Shaft of Penis

Fordyce spots

Variants of Normal



Benign papillae

Variants of Normal



Physiologic hyperpigmentation

Algorithm for Diagnosis of Genital Disorders



Are there visible changes?

❧ **No**, only symptoms

- ❧ Pruritus
- ❧ Pain

❧ **Yes**

❧ Lifted/removed epithelium

- ❧ Pustules
- ❧ Blisters
- ❧ Ulcers

❧ Lesions are red, but epithelium is intact

- ❧ Patches and plaques
- ❧ Papules and nodules

❧ Lesions, but other than red

- ❧ Skin colored
- ❧ White
- ❧ Brown/black/blue



Pruritus



❧ Idiopathic

- ❧ Tissue appears normal
- ❧ Characterized by scratching or rubbing
- ❧ Itch-scratch cycle
- ❧ Probably a subclinical variant of atopic dermatitis

❧ Atopic dermatitis

- ❧ Allergic IgE reaction to common environmental allergens (eczema)
- ❧ History of allergies or asthma
- ❧ Localized form: Lichen Simplex Chronicus

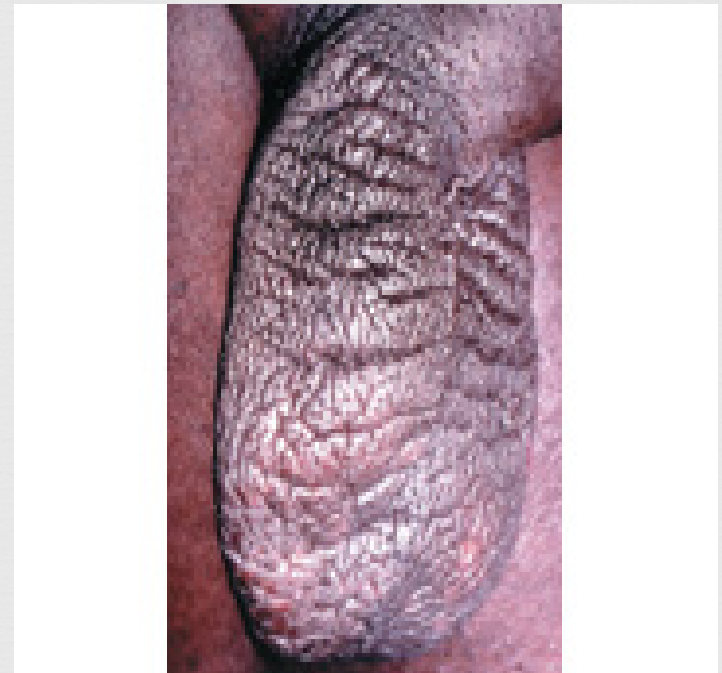


Red Plaques and Patches



- ❧ Atopic dermatitis
- ❧ Contact dermatitis
 - ❧ Irritant Contact dermatitis
 - ❧ Allergic contact dermatitis
- ❧ Seborrheic dermatitis
- ❧ Psoriasis
- ❧ Tinea cruris
- ❧ Erythrasma
- ❧ Candidiasis
- ❧ Lichen planus
- ❧ Extramammary Paget disease
- ❧ Intraepithelial neoplasia

Lichen Simplex Chronicus



Lichen Simplex Chronicus



- ❧ **Cause:** not known, probably genetic predisposition
 - ❧ Heat, sweat triggers
- ❧ **Diagnosis:** Based on clinical findings
- ❧ Biopsy not very helpful in finding underlying problem

Consider:

- ❧ ***Wet mounts:*** rule out candidiasis
- ❧ ***KOH:*** for dermatophyte fungi (tineas)
- ❧ ***Biopsy*** helpful if there is loss of architectural landmarks (labia minora) in women to rule out lichen sclerosis

Lichen Simplex Chronicus



Management Goals:

- ❧ Reduce triggers in local environment
- ❧ Restore normal barrier layer function
- ❧ Reduce inflammation
- ❧ Stop itch-scratch cycle
- ❧ Breathable fabrics
- ❧ Weight loss
- ❧ Manage fecal, urinary, vaginal secretions
- ❧ Stop excessive bathing
- ❧ Lubricant/barrier
- ❧ Topical steroids (ointment, high potency) for a month or until clinical improvement
- ❧ Antihistamines



Irritant Contact Dermatitis

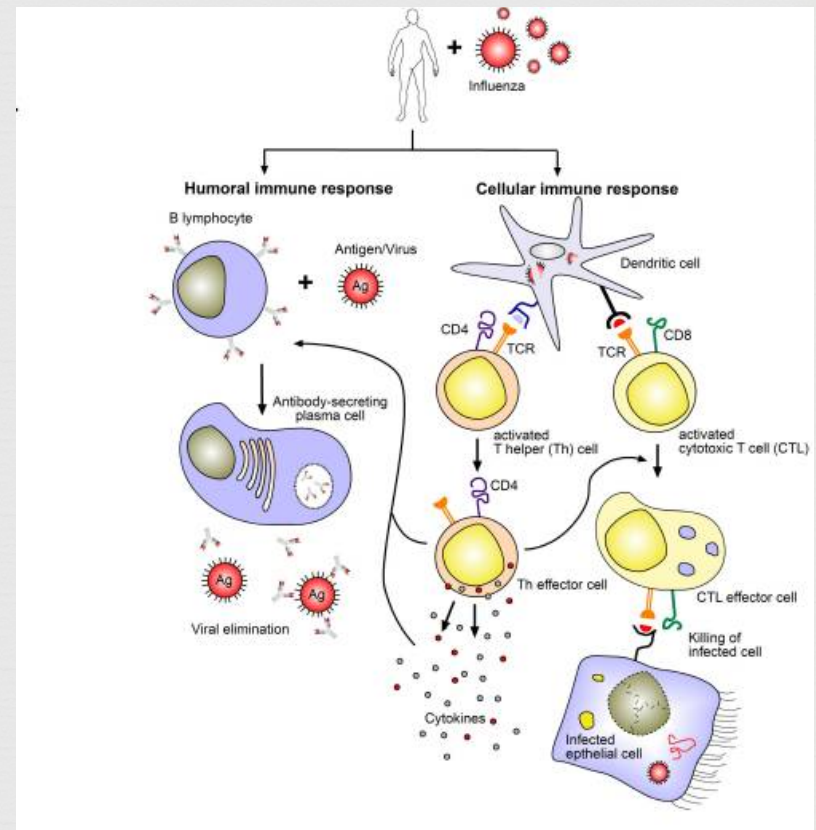


- ❧ Eczematous reaction to a substance on the skin
- ❧ Most data on women
- ❧ Irritation, soreness, rawness
- ❧ Urine, feces, soap, antifungal creams, panty liners, spermicides
- ❧ TCA, imiquimod, podophyllin products
- ❧ Identify and eliminate irritants
- ❧ Mid-potency topical steroid
- ❧ Barriers: zinc oxide, lubricants
- ❧ Tepid soaks

Allergic Contact Dermatitis



- ❧ Immunological response
- ❧ Cell-mediated delayed hypersensitivity reaction
 - ❧ OTC preparations: benzocaine, bacitracin, spermicides, parabens, fragrances
- ❧ Latex: IgE response, immediate reaction





Seborrheic Dermatitis/Intertrigo

- ❧ Located where moisture is retained (sweat, urine)
- ❧ Maceration
- ❧ Skin folds
 - ❧ Crural folds
 - ❧ Axillae
 - ❧ Umbilicus
- ❧ Indistinct margins
- ❧ Red patches and scale
- ❧ Diagnosis: Clinical
- ❧ Can have superimposed candida
- ❧ Management
 - ❧ Reduce heat and moisture
 - ❧ Topical corticosteroids
 - ❧ Hydrocortisone 1-2.5%
 - ❧ Triamcinolone 0.1%
 - ❧ Topical ketoconazole cream BID

Seborrheic Dermatitis/Intertrigo



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Candidiasis



Candidiasis



❧ Diagnose with KOH prep



❧ Management:

- ❧ Eliminate heat, moisture
- ❧ Topical azoles BID until clear
- ❧ Attention to DM, obesity, immunocompromised patients

Tinea Cruris

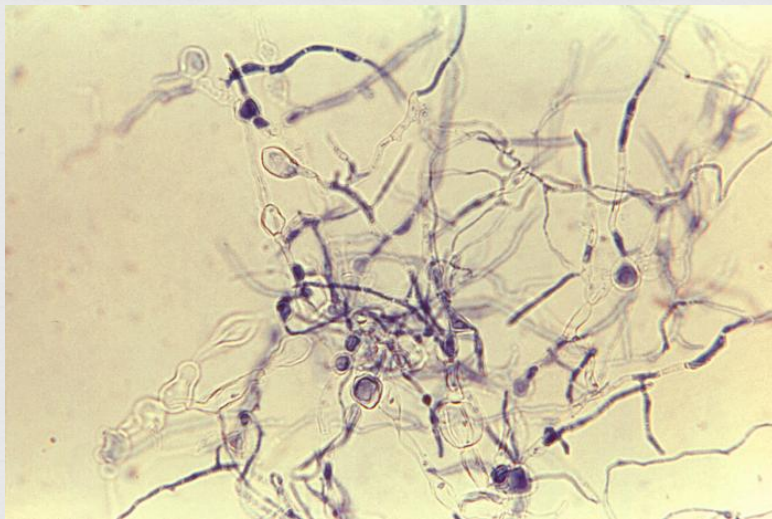


Tinea Cruris



Diagnose:

- ❧ KOH prep from skin scraping



Management:

- ❧ Topical azoles 1-2x day until clear
- ❧ Hair follicle involvement: oral therapy (i.e. fluconazole 100-200mg/day for 1-2 weeks)
- ❧ Topical triamcinolone 0.1% first few days

Erythrasma



- ❧ Mimics tinea cruris
- ❧ Found mostly in men
- ❧ Proximal, medial thigh and crural crease
- ❧ Scrotum, penis, vulva usually not affected
- ❧ *Corynebacterium minutissimum*, bacteria prevalent in warm environments

❧ Diagnosis:

- ❧ Clinical exam
- ❧ Wood's light fluorescence (coral-pink)
- ❧ Negative KOH prep

Treat with Erythromycin
500 mg BID for 1-2 weeks

Erythrasma

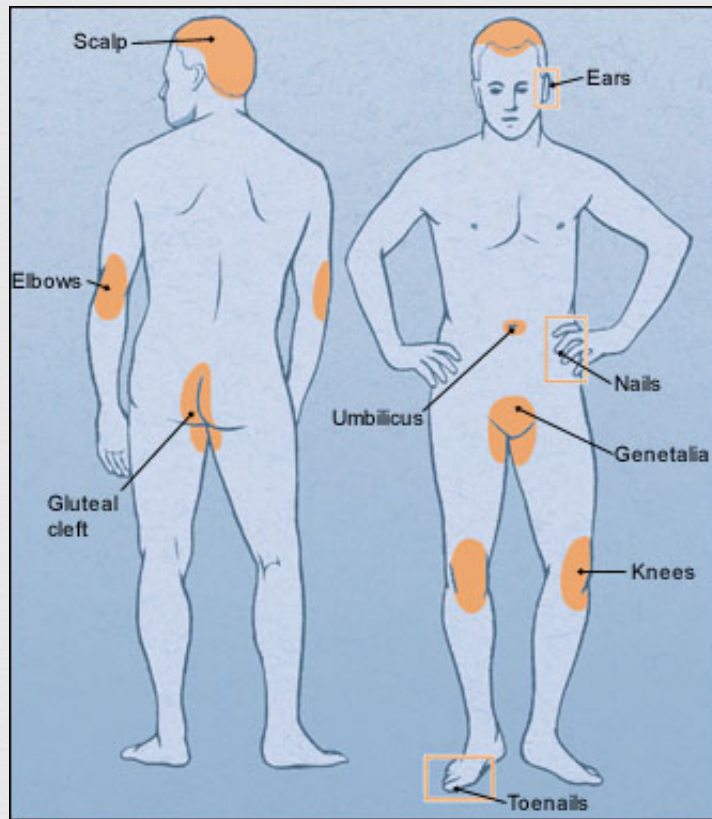


Psoriasis



- ❧ Affects 2-3% of people
- ❧ Onset: young adults
- ❧ Etiology: genetic, autoimmune, environmental
- ❧ Contributing factors: alcohol, smoking, obesity, medications (NSAIDs and lithium)
- ❧ Rapid proliferation of epidermis
- ❧ Associated arthritis
- ❧ Plaques and silvery scales on scalp, elbows, knees, gluteal cleft, genitals
- ❧ 20% with Koebner's phenomenon
- ❧ Inverse psoriasis: skin folds
- ❧ Genitals
 - ❧ Women: affects hair-bearing areas (vulva)
 - ❧ Men: glans, shaft, scrotum, groin

Psoriasis



Psoriasis



Psoriasis



❧ Diagnosis:

- ❧ Other psoriatic lesions?
- ❧ Biopsy helpful, but can be nonspecific in older lesions
- ❧ Negative fungal scrapings/cultures
- ❧ No response to antifungal medication

❧ Management:

- ❧ Potent topical corticosteroids with tapering doses
 - ❧ Triamcinolone 0.1%
- ❧ Ultraviolet light of little use to genitalia
- ❧ Oral methotrexate
- ❧ Immunosuppressant agents

Lichen Planus



- ❧ Different clinical presentations
- ❧ Autoimmune disorder, cell-mediated
- ❧ Usually self-limiting
- ❧ Resolves in few years





Lichen Planus



Lichen Planus



❧ Diagnosis:

- ❧ Clinical findings
- ❧ Biopsy
- ❧ Differential: Bowen disease, candidiasis, psoriasis, herpes

❧ Management:

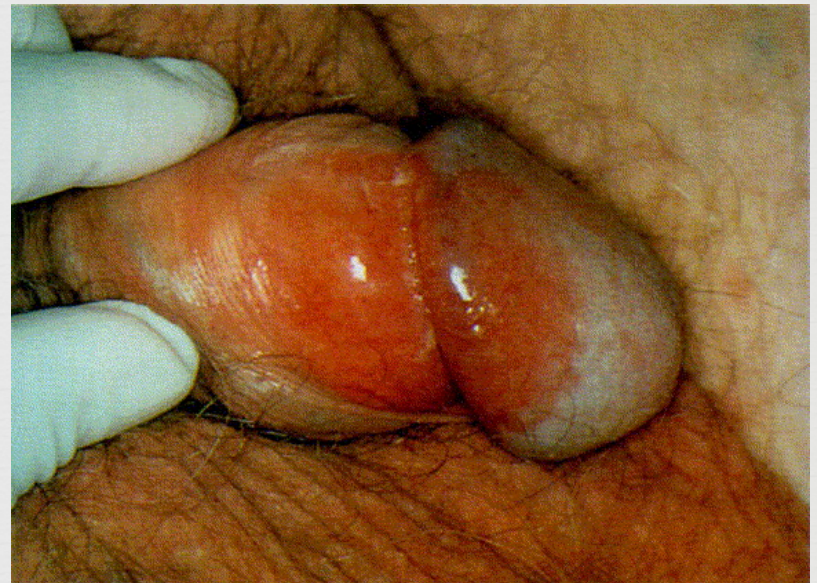
- ❧ Topical corticosteroids (clobetasol 0.05% and taper down)
- ❧ Short burst of oral prednisone if needed

Plasma Cell Mucositis



- ❧ Poorly understood
- ❧ Onset after puberty
- ❧ Deep red solitary plaque
- ❧ May erode, bleed
- ❧ Related to lichen planus?
- ❧ Diagnosis by biopsy
- ❧ Management:
 - ❧ No good therapy
 - ❧ Circumcision
 - ❧ Potent topical steroids?
 - ❧ Imiquimod?
 - ❧ CO2 or YAG laser?

Plasma Cell Mucositis



Extramammary Paget's Disease



- ❧ Primary or secondary forms
- ❧ Onset: usually >50
- ❧ More common in women
- ❧ 10-20% with underlying GU/GI malignancy
- ❧ Initial symptom: pruritus
- ❧ Presentation:
 - ❧ Well demarcated red plaque
 - ❧ Rough, scaling or moist surface
 - ❧ White thickened islands
 - ❧ Erosions



Extramammary Paget's Disease

❧ Diagnosis

❧ Clinical suspicion

- ❧ Resembles benign skin disorders and Bowen's disease

❧ Biopsy



❧ Management: excision

❧ <1 mm invasion: good prognosis

- ❧ Laser, radiation, imiquimod

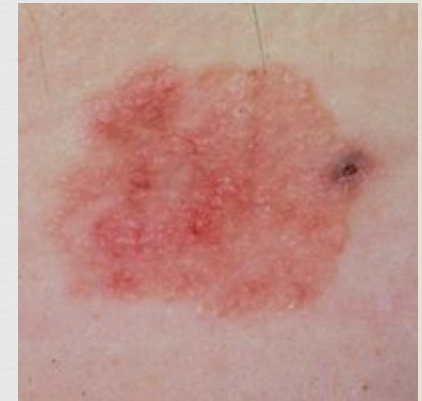
❧ >1mm invasion: node evaluation

- ❧ Determine primary or secondary
- ❧ Evaluate for GU/GI malignancy

Intraepithelial Neoplasia



- ❧ Non-invasive but full thickness dysplasia
- ❧ Many types
 - ❧ HPV-related
 - ❧ Bowen's disease: older
- ❧ Presentation
 - ❧ Well-demarcated plaques, scaling, hyperkeratosis



Intraepithelial Neoplasia



Bowen Disease/VIN/PIN

❧ Undifferentiated:

❧ HPV 16, 18, 31, 33

❧ 2/3 - full thickness

❧ Differentiated:

❧ Lower 1/3 of epithelium

❧ No HPV link

❧ Lesions may be accentuated with 5% acetic acid

❧ White, red, skin colored plaques

❧ Diagnosis: biopsy

❧ Management: surgical, imiquimod, laser

Red Papules and Nodules



- ❧ Folliculitis
- ❧ Keratosis pilaris
- ❧ Bites & infestations
- ❧ Angiomas,
angiokeratomas
- ❧ Prurigo nodularis
- ❧ Pyogenic granuloma
- ❧ Urethral caruncle
- ❧ Vulvar endometriosis
- ❧ Hematoma
- ❧ Kaposi Sarcoma

Keratosis Pilaris



- ❧ Common in children, disappears in 4th decade
- ❧ Clusters of papules
- ❧ Excess keratinization of outer hair follicles
- ❧ Noninfectious
- ❧ Management
 - ❧ Bath soaks/loofah
 - ❧ Moisturizer



Bites & Infestations



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- ❧ Insect bites on genitals are rare
- ❧ Nodular scabies
 - ❧ Almost exclusively in males
- ❧ Presentation
 - ❧ Red-brown dome-shaped papules
 - ❧ Glans, shaft, scrotum
- ❧ Diagnosis: biopsy
- ❧ Management: scabicide

Cherry Angiomas & Angiokeratomas

∞



Prurigo Nodularis (Picker's Nodules)



- ∞ Increased keratin
- ∞ Results from chronic scratching, picking
- ∞ May have underlying folliculitis
- ∞ Diagnosis: Biopsy
- ∞ Differential: Scabies
- ∞ Treat:
 - ∞ Intralesional triamcinolone
 - ∞ Liquid nitrogen
 - ∞ Nighttime sedation
 - ∞ SSRIs

Pyogenic Granuloma



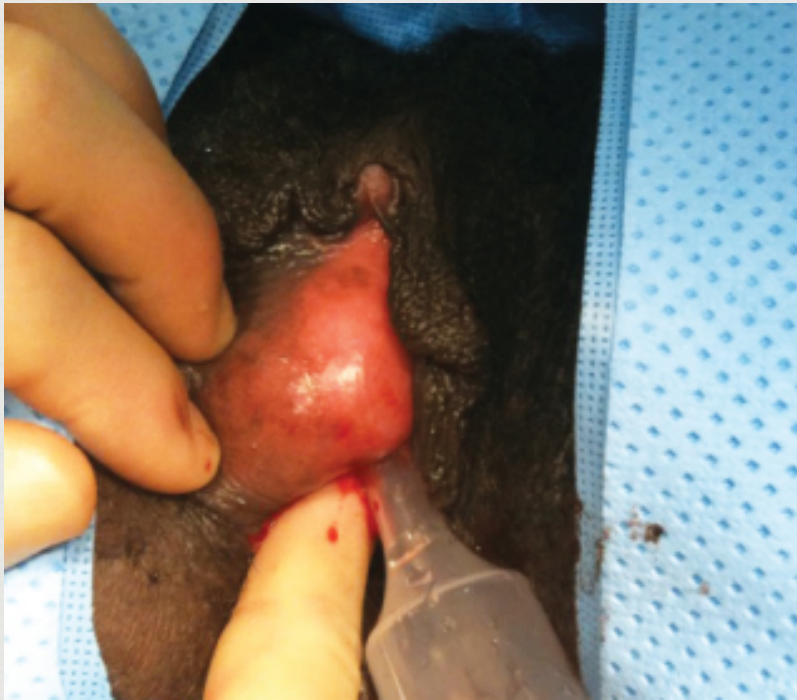
- ❧ Benign neoplasm
- ❧ Cause unknown, may be second to trauma
- ❧ Pregnancy
- ❧ Management: shaved excision



Urethral Caruncle & Prolapse



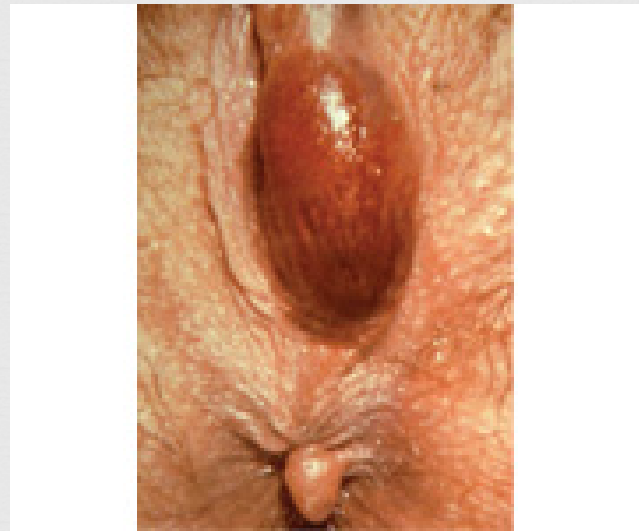
Vulvar Endometriosis



- ❧ Cyclic enlargement and pain with menses
- ❧ Implantation may occur during parturition
- ❧ Diagnosis: presumptive, by clinical presentation
- ❧ Management: refer for surgical excision
- ❧ May require hormonal suppression



Hematoma



Kaposi Sarcoma



Figure 1: Numerous violet papules and nodules grouped in the glans penis



Crohn's Disease



- ❧ Asymmetrical edema
- ❧ Linear ulcers
- ❧ Fistulae
- ❧ Also: skin tags, papules, nodules

Pustular Lesions



- ❧ Folliculitis
- ❧ Furuncles
- ❧ Carbuncles
- ❧ Hidradenitis suppurativa

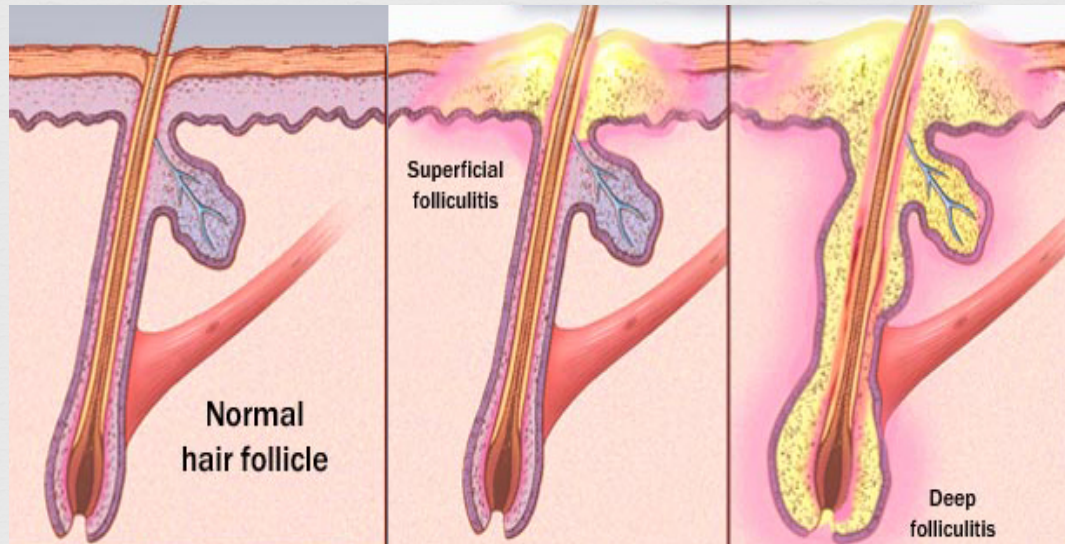
Solid lesions that appear pustular:

- ❧ Epidermal cysts
- ❧ Molluscum contagiosum

Folliculitis



- ❧ Etiology: bacterial, fungal, or irritant inflammation of follicle
- ❧ Superficial



Folliculitis



Folliculitis



- ❧ Irritant: shaving
- ❧ Fungal: middle aged and older men (tinea)
- ❧ Bacterial:
 - ❧ Staphylococcus
 - ❧ No known risk factor
 - ❧ Pseudomonas
 - ❧ Bathing suits
 - ❧ Hot tubs
- ❧ Diagnosis
 - ❧ Clinical presentation
 - ❧ Culture
- ❧ Management
 - ❧ Bacterial: oral, topical antibiotics
 - ❧ Fungal: oral antifungal
 - ❧ Irritant: avoid shaving
 - ❧ Loose, cool clothing
 - ❧ Oral anti-inflammatory antibiotics

Furuncles



- ❧ Involves deeper follicle
- ❧ Red, painful nodules
- ❧ Rupture and drain
- ❧ More common in immunosuppression, diabetes
- ❧ Usually *S. aureus*



Furuncles



❧ Diagnosis:

- ❧ Clinical presentation
- ❧ Culture: *S. aureus*

❧ Clinical confusion:

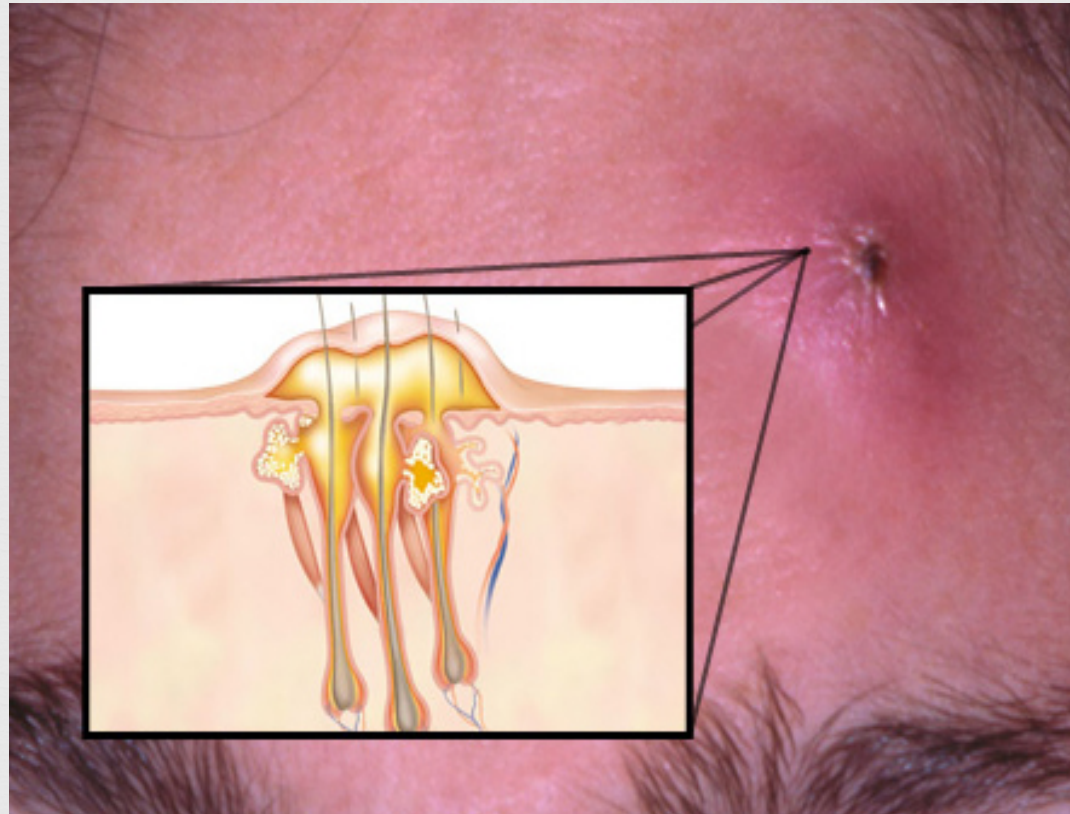
- ❧ Hidradenitis
 - ❧ Limited to genital and axillary areas
 - ❧ Has comedones and scarring
 - ❧ Cultures: normal skin flora

❧ Management

- ❧ Oral antibiotics
 - ❧ Clindamycin
- ❧ Warm soaks
- ❧ Incision and draining



Carbuncles



Hidradenitis Suppurativa



- ❧ Cystic acne of skin folds
- ❧ Affects groin, axillae, inner thighs, vulva, scrotum
- ❧ Occurs after puberty
- ❧ Strong association with smoking



Hidradenitis Suppurativa



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Hidradenitis Supperativa



❧ Presentation

- ❧ Fluctuant, draining nodules
- ❧ Location
- ❧ Sinus tracts and scars
- ❧ Comedones
- ❧ Wide range of severity

❧ Diagnosis

- ❧ Clinical presentation
- ❧ Chronicity

❧ Management

- ❧ I&D of fluctuant lesions
- ❧ Oral antibiotics
- ❧ Surgical excision of affected areas
- ❧ Hormonal: high estrogen contraceptives (0.035mg), spironalactone
- ❧ Oral retinoids
 - ❧ Isotretinoin

Epidermal Cysts



- ❧ Obstructed hair follicles that are distended with keratin
- ❧ White, skin colored, or yellow
- ❧ Occasional inflammatory response from keratin
- ❧ No treatment necessary



Molluscum Contagiosum



- ❧ May be transmitted sexually
- ❧ Genitals, thighs
- ❧ Domed papules, may be umbilicated
- ❧ May be inflamed, pruritic
- ❧ Poxvirus
- ❧ Resolve spontaneously
- ❧ May use topical destruction, imiquimod



Erosive and Vesicular Lesions



- ❧ Herpes Simplex
- ❧ Impetigo
- ❧ Pemphigus
- ❧ Hailey-Hailey disease
- ❧ Bullous erythema multiforme
- ❧ Fixed drug eruptions
- ❧ Trauma/artifact
- ❧ Malignancies



Herpes Simplex





Herpes Simplex



- ❧ Clinical appearance can be confusing
 - ❧ Vesicular and erosive presentations
 - ❧ Differentiate from other ulcerative disorders, folliculitis
- ❧ Culture: false negatives
- ❧ PCR: test of choice
- ❧ Serology:
 - ❧ Consult CDC guidelines: Type 2
 - ❧ Conversion at 6 weeks
 - ❧ Up to 80% of population with positive IgG for HSV

CDC Guidelines on HSV 2 Serology

Appropriate for:

- ☞ Recurrent/atypical symptoms and negative cultures
- ☞ Clinical fit, no lab confirmation
- ☞ Partner with genital herpes

Consider in:

- ☞ STD visit, person with multiple partners
- ☞ Person with HIV
- ☞ MSM with risk for HIV

Inappropriate for:

- ☞ General screening

Herpes Simplex



Impetigo



S. aureus

- ❧ Fragile blisters
- ❧ Round lesions with collarettes

Streptococcus spp.

- ❧ Erosion and crusting

Diagnosis

- ❧ Clinical suspicion
- ❧ Culture

Management

- ❧ Antibiotic therapy (clindamycin)



Pemphigus



Pemphigus vulgaris

- ❧ Autoimmune intraepidermal disorder
- ❧ Mucosal flaccid blisters and superficial erosions
- ❧ Later stage: hyperkeratotic skin
- ❧ Includes genitals & rectum
- ❧ Cervix: Pap may show LGSIL
- ❧ Penis: on glans, corona, distal shaft

Diagnosis: biopsy

Management: systemic steroids



Pemphigus Vulgaris & Vegetans



Large erosions heal without scarring



Superficial crusting plaques of vegetans

Bullous Pemphigoid



Common autoimmune blistering disease

- ❧ Intense pruritus precedes blisters
- ❧ Rare genital involvement
- ❧ On keratinized skin
- ❧ Onset: elderly

Diagnosis:

- ❧ Biopsy

Management:

- ❧ Topical or systemic steroids

Hailey-Hailey Disease



Familial pemphigus

- ❧ Recurrent small blisters and crusted erosions
- ❧ Sites: intertriginous zones, perianal area
- ❧ Evolve into thickened macerated plaques

Diagnosis: Shape, FHx, Bx

Management: supportive

- ❧ Topical/oral antibiotics
- ❧ High-potency topical steroids

Hailey-Hailey Disease



Bullous Erythema Multiforme



- ❧ Stevens-Johnson Syndrome
- ❧ Hypersensitivity reaction
- ❧ Self-limiting
- ❧ Blistering forms may affect mucosal surfaces
- ❧ Rupture quickly leaving erosions
- ❧ Heal quickly after inciting agent is removed
- ❧ Scarring can be severe
 - ❧ Vaginal synechiae
 - ❧ Penile phimosis (uncircumcised)



Fixed Drug Eruptions



On keratinized skin:

- ❧ Well-demarcated
- ❧ Edematous, erythematous, round

On mucosal areas:

- ❧ Blister and erode quickly
- ❧ Shape irregular
- ❧ Burning

Diagnosis:

- ❧ History of recent drug ingestion
- ❧ Biopsy

Management:

- ❧ Identification and elimination of offending medication
- ❧ Supportive therapy

Fixed Drug Eruptions



Traumatic Lesions



Diagnosis:

- ❧ History: event is immediately painful

Typical insults:

- ❧ Chemical burn
- ❧ Chemicals in creams
- ❧ Thermal
- ❧ Surgery
- ❧ Zippers
- ❧ Bites
- ❧ Miscellaneous



Management: soaks, infection control, pain treatment

Traumatic Lesions



Erosive Malignant Lesions



Basal Cell Carcinoma

- ❧ 5% of genital cancers
- ❧ Increased incidence in fair-skinned, older
- ❧ Itching
- ❧ Rolled edges, telangiectasias
- ❧ Local invasion and necrosis
- ❧ Rare metastases
- ❧ Diagnosis: biopsy
- ❧ Treat: local excision

Squamous Cell Carcinoma

- ❧ 90% of genital cancers
- ❧ Sites of chronic inflammation or HPV
- ❧ Ages >65 more common
- ❧ Red or skin colored plaques that erode
- ❧ May be lymphadenopathy
- ❧ Diagnosis: biopsy
- ❧ Management: surgical

Erosive Malignant Lesions



Basal Cell Carcinoma



Squamous Cell Carcinoma



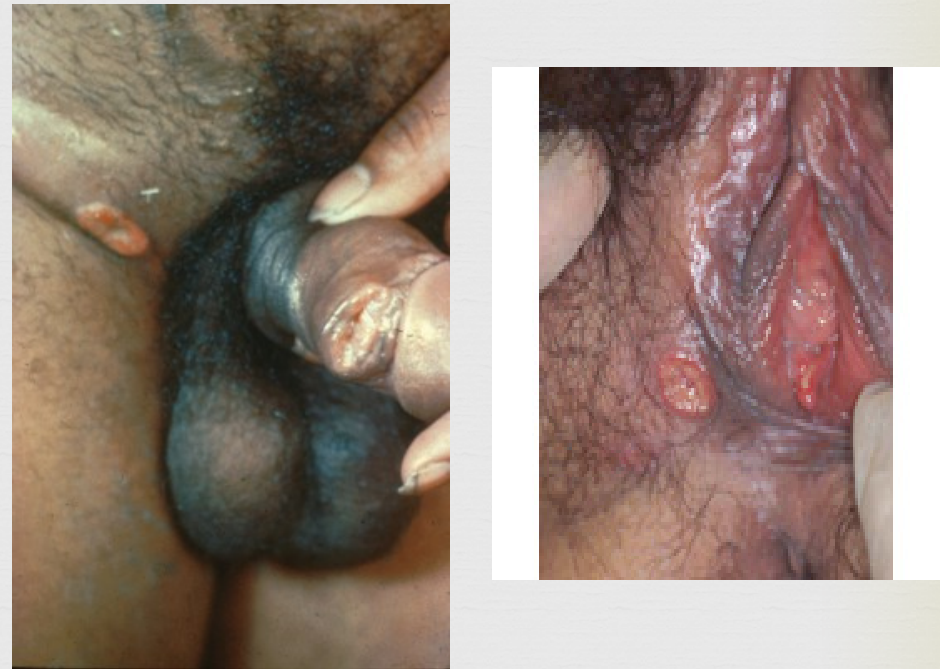
Other Ulcerative Lesions



Syphilis



Chancroid



Other Ulcerative Lesions



Granuloma Inguinale



Lymphogranuloma Venereum



Other Ulcerative Lesions



Aphthous Ulcers



Behçet Disease



Non-Red Lesions



White lesions

- ❧ Vitiligo
- ❧ Post-inflammatory hypopigmentation
- ❧ Lichen sclerosis
- ❧ Lichen planus
- ❧ Lichen simplex chronicus
- ❧ White sponge nevus
- ❧ Intraepithelial neoplasia
- ❧ Epidermal cysts
- ❧ Molluscum contagiosum

Skin-colored lesions

- ❧ Genital warts
- ❧ Condyloma latum
- ❧ Molluscum
- ❧ Skin tag (acrochordon)
- ❧ Intradermal nevi
- ❧ Lipomas
- ❧ Basal and squamous cell carcinomas

White Lesions



Vitiligo



Post-inflammatory
Hypopigmentation



Lichen Sclerosus



Females

- ☞ Childhood and post-menopausal
- ☞ Labia minora, clitoris, labial sulci (hourglass)



Males

- ☞ Childhood and later life
- ☞ White papules and plaques on glans, prepuce, shaft



Lichen Sclerosus



- ❧ Epidermal atrophy
- ❧ Crinkled appearance
- ❧ Ecchymosis from easily damages vessels
- ❧ Scarring of clitoral hood and uncircumcised male prepuce
- ❧ Shrinkage/loss of labia minora
- ❧ Mucosa not affected
- ❧ Extragenital sites: back, wrists, shoulders
- ❧ 4% chance of squamous cell cancer in long standing untreated LS





Lichen Sclerosis



Etiology

- ❧ Lymphocyte-mediated inflammation
- ❧ Autoimmune disorder?

Diagnosis

- ❧ Clinical presentation
- ❧ Biopsy of crinkled or ecchymotic area

Management

- ❧ Ultra-potent topical steroid (clobetasol)
- ❧ Apply nightly
- ❧ Reduce frequency with symptom improvement
- ❧ Men: usually require circumcision
- ❧ Careful long term follow up

Intraepithelial Neoplasia



White Sponge Nevus



- ❧ Uncommon autosomal dominant condition
- ❧ Affects mucosal surfaces (oral, esophageal, genital)
- ❧ White, keratotic epithelium
- ❧ Diagnosis: biopsy
- ❧ Treatment: none for genital lesions

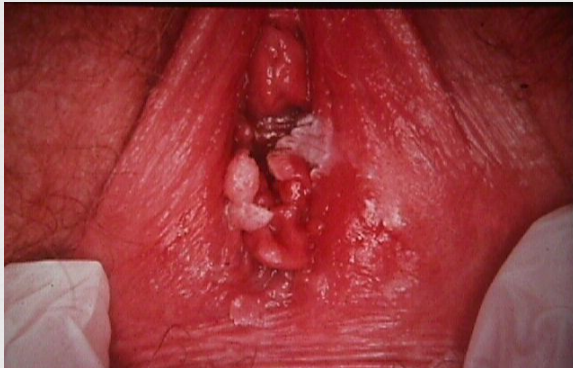


Oral lesion

Skin-Colored Lesions



External Genital Warts



Condyloma Latum



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Skin Tags (Acrochordons)



- ❧ Fibroepithelial polyps
- ❧ Soft, skin-colored/tan
- ❧ Inguinal folds, inner thigh, buttocks, rare on penis
- ❧ Not on modified mucus membranes
- ❧ Diagnosis: clinical
- ❧ Treatment: none needed



Lipomas



- ❧ Rare
- ❧ Soft, smooth, skin-colored, mobile
- ❧ Labia majora and periclitoral areas
- ❧ Diagnosis: clinical
- ❧ Treatment: not needed unless bothersome

Squamous Carcinoma



HPV-Related

- ❧ Variegated appearance
 - ❧ Pink
 - ❧ Red
 - ❧ Brown
 - ❧ Black
 - ❧ Skin-colored
- ❧ Longer stage from in-situ to invasive
- ❧ Younger men
- ❧ Multiple lesions
- ❧ Shaft, perianal

Non-HPV Related

- ❧ Less variegated
 - ❧ Red
 - ❧ White
 - ❧ Skin-colored
- ❧ More rapid progression from in-situ to invasive
- ❧ Older men
- ❧ Solitary lesions
- ❧ Glans, corona, prepuce
- ❧ Association with lichen sclerosis

“PIN” and Invasive Cancer



Penile Intraepithelial Neoplasia



Squamous Cell Cancer



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“VIN” and Invasive Cancer



HPV-Related

- ❧ Flat topped papules, plaques
- ❧ Multiple lesions
- ❧ Red, brown, skin-colored
- ❧ Younger women
- ❧ Vestibule, labia majora and vulva, perianal

Non-HPV Related

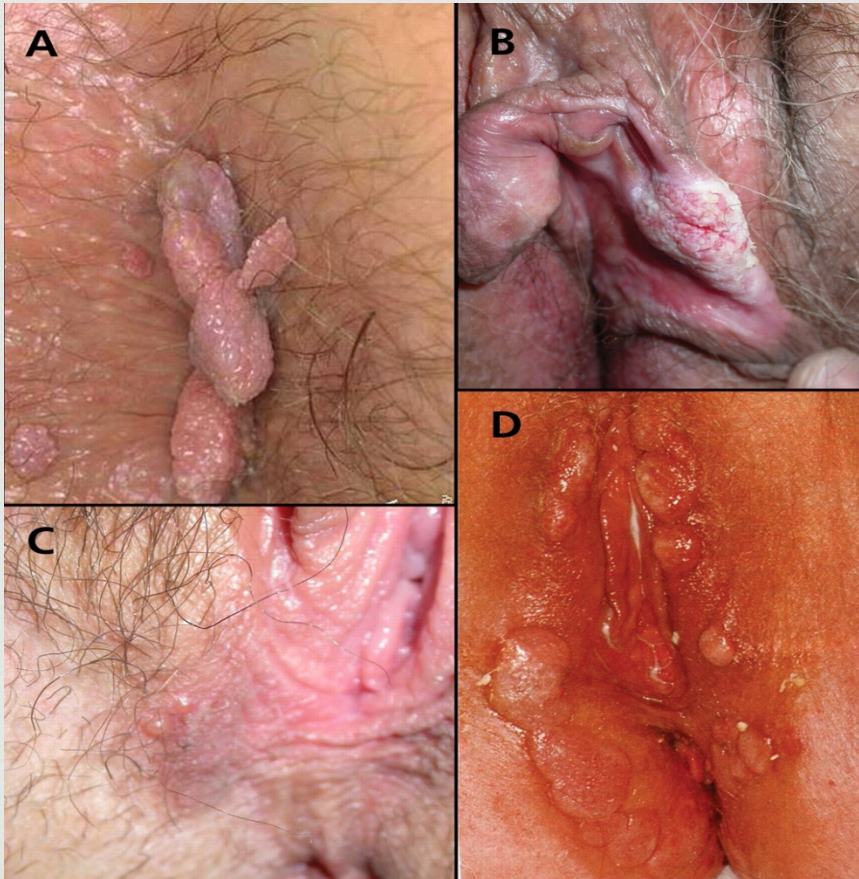
- ❧ Solitary lesions
- ❧ Pink, red, white
- ❧ Nodule, ulcer
- ❧ Older women
- ❧ Vestibule, labia minora
- ❧ Association with lichen sclerosis and lichen planus

VIN & SCC

VIN



SCC



Basal Cell Carcinoma



- ❧ Older men and women
- ❧ Solitary papule, plaque, or nodule
- ❧ May be ulcerated
- ❧ Only on keratinized skin
 - ❧ Women: labia majora
 - ❧ Men: scrotum, penis
 - ❧ Perianal: both
- ❧ Diagnosis: biopsy



Pigmented Lesions



- ❧ Seborrheic keratoses
- ❧ Pigmented warts
- ❧ Intraepithelial neoplasia
- ❧ Kaposi sarcoma
- ❧ Genital melanosis
- ❧ Pigmented nevus (mole)
- ❧ Melanoma

Seborrheic Keratoses



- ❧ Sites: trunk, genitals, lower limbs
- ❧ Sharply margined
- ❧ Scale or waxy feel
- ❧ Cause unknown
- ❧ Biopsy to rule out malignancy



Pigmented Warts



Source: Usatine RP, Smith MA, Mayeaux EJ Jr, Chumley H, Tysinger J:
The Color Atlas of Family Medicine: www.accessmedicine.com
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Intraepithelial Neoplasia



- ❧ Vulva, penis, scrotum
- ❧ Tan, brown, black
- ❧ History
- ❧ Biopsy for diagnosis

Genital Melanosis



- ❧ Flat, dark, smooth
- ❧ More common on mucosa (labia minora, glans, prepuce)
- ❧ Solitary or multifocal
- ❧ Asymmetry
- ❧ More common in middle age and older
- ❧ Biopsy



Pigmented Nevus



- ❧ **Common nevi: 90%**
 - ❧ Tan, brown, even color
- ❧ **Dysplastic nevi**
 - ❧ Brown, asymmetry, speckling of color (with red, white, blue)
- ❧ **Atypical nevi**
 - ❧ Like common, but larger (>6 mm)
 - ❧ May have bumpy surface
- ❧ **Nevi associated with lichen sclerosis**
 - ❧ Black, smooth
 - ❧ Macule, papule, patch

Pigmented Nevus



Common nevus

∞ No biopsy if no atypia

Nevus from LS

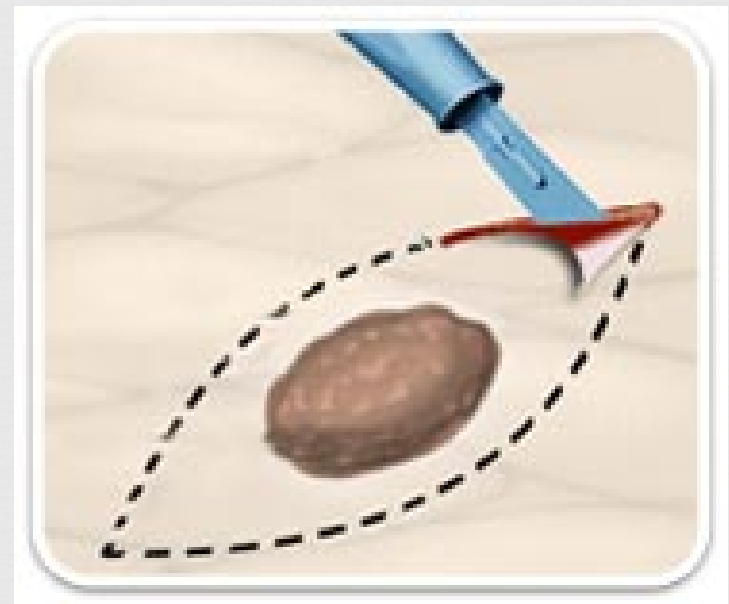
∞ Refer for biopsy

Dysplastic nevus

∞ Refer for biopsy

Atypical nevus

∞ Refer for biopsy



Melanoma



Presentation

- ❧ Black exophytic mass
- ❧ Color variegation
- ❧ Location:
 - ❧ Labia, clitoris
 - ❧ Glans, prepuce, shaft
 - ❧ Anus
- ❧ May be nodular or ulcerated
- ❧ 50% are localized disease
- ❧ Very rare
- ❧ Occurs in older age groups (50-80)
- ❧ More common in Caucasians
- ❧ DDX: atypical nevi
- ❧ 20% are multifocal
- ❧ Genetic etiology?
- ❧ Relation to HPV?

Melanoma



Dermatologic Procedures



Skin Scrapings for KOH



☞ <https://www.youtube.com/watch?v=FohwEA5byYM>

☞ <https://www.youtube.com/watch?v=ZK-KsV1S7Y0>

Local Anesthesia



- ❧ 1% lidocaine
 - ❧ May add epinephrine for vulva
 - ❧ 0.5 to 1.0 mL
- ❧ 30 gauge needle

- ❧ http://www.youtube.com/watch?v=Uxav0kAWU14&feature=results_video&playnext=1&list=PLBF100062B46E56A7



Biopsy Techniques



Punch Biopsy:

<http://www.youtube.com/watch?v=7CzDEok8Wmo>

Shave Biopsy:

<https://www.youtube.com/watch?v=nbdmmukko4s>

Basic Suture Technique



⌘ <http://www.youtube.com/watch?v=6P0rYS6LeZw>

⌘ <http://www.youtube.com/watch?v=bXqvo2St8lE>

Clinical Resources



⌘ http://dermatologymadesimple.blogspot.com/2008_10_01_archive.html

Biopsy of the Vulva

⌘ <http://emedicine.medscape.com/article/1998133-overview>

Biopsy of the Penis

⌘ <http://emedicine.medscape.com/article/1997665-overview>

Acknowledgements



- ❧ Content from Edwards & Lynch, (2011) *Genital Dermatology Atlas (2nd ed.)*. Wolters Kluwer/LWW
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