Benign Lesions of the Vulva and Vulva Dystrophy

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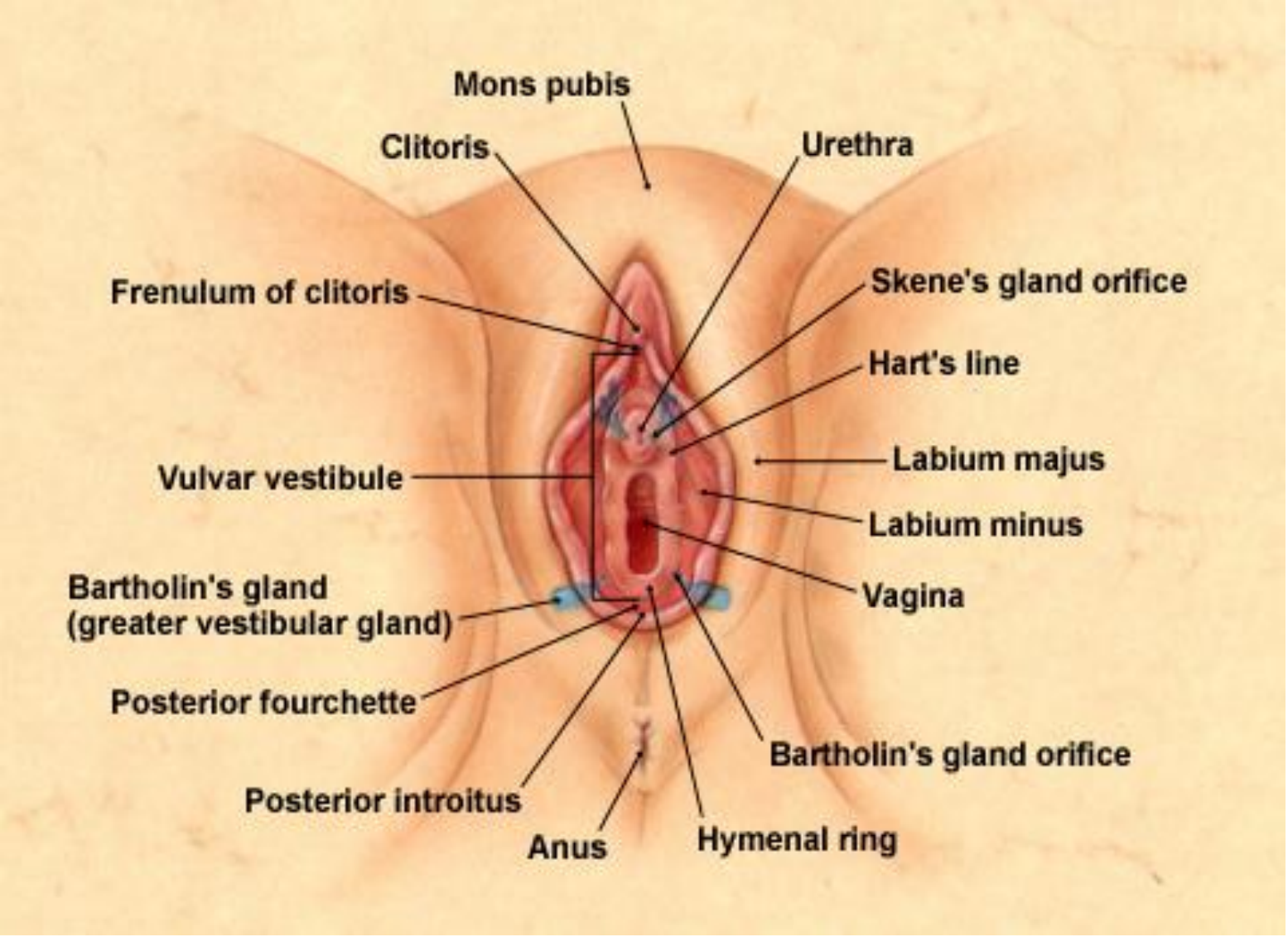
Introduction

- Conditions that lead to changes to vulva cells, but that are not cancerous.
- They are not usually life-threatening.
- Vulva symptoms are common and cause considerable distress for women.
- Symptoms often are chronic and can affect quality of life including sexual function.

Anatomy of the Vulva



Common presentation vulva disorder

- Pruritis / Itching
  - Most common to many of these conditions, often intense
- Pain (Vulvodynia)
  - Generalized
  - Localized (vestibulodynia, clitorodynia, hemivulvodynia)
  - May be Provoked (sexual, nonsexual) or unprovoked
- Ulceration
- Masses
- Abnormal colouration
  - White colouration
    - Dicreased vascularity, Increase in Keratin, Loss of Melanin
  - Dark colouration
    - Increased Melanin
  - Redness
    - Thinning of epidermis, Ulceration, Inflammation, Neovascularisation

Classification based on pathogenesis

1. Infectious disorders
   - Viruses
   - Bacteria
   - Fungi
2. Benign cystic tumors
3. Benign solid tumors
4. Non-neoplastic epithelial disorders
   - Inflammatory disorders
   - Blistering disorders
   - Pigmentary disorders
   - Ulcerative disorders
5. Vulval atrophy
6. Developmental abnormalities

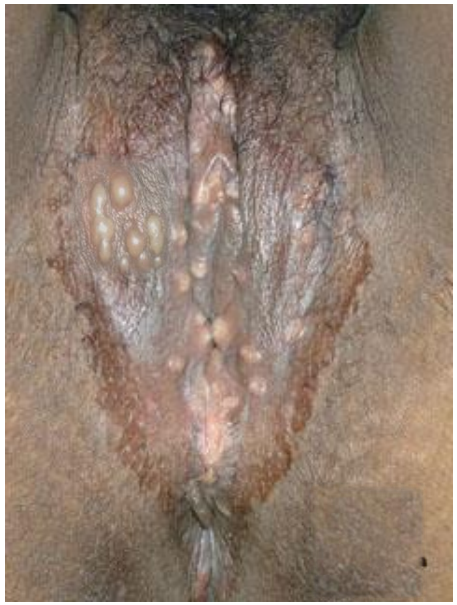
1). Infectious Disorder

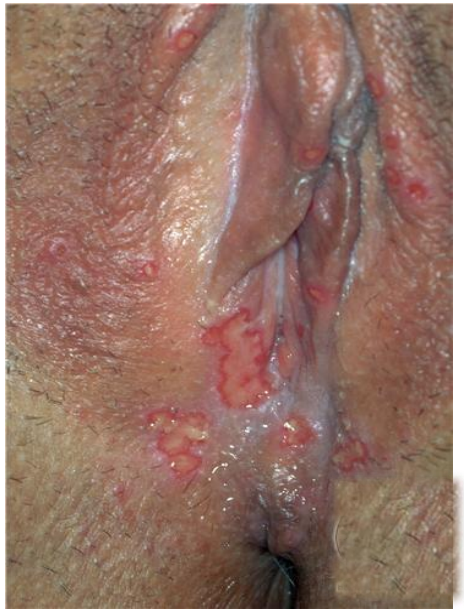
Viruses

- Herpes genitalis
- Herpes zooster
- Molluscum contagiosum
- Condylomata

Herpes Genitalis

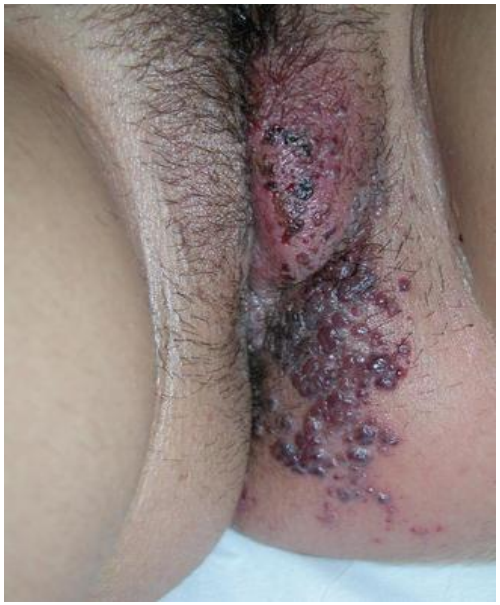
- Most caused by Herpes simplex Virus type 2
- 10% caused by Herpes simplex Virus type 1
- Usually sexually transmitted.
- Clusters small painful blisters that ulcerate
- Reactivate causing recurrences often for life
- Diagnosis
  - Typical clinical manifestations
  - Serology for HSV-2
- Management
  - Loose cotton underwear
  - Keep area clean and dry
  - Anti-inflammatory analgesics
  - Topical treatment : Calamine, Acyclovir
  - Early treatment with Antiviral
    - Limits duration of primary infection, recurrences
    - Acyclovir 200mg five times daily for 5-7days)
    - Prophylactic Antiviral for frequent recurrences
- Prevention by Safe sex and practices

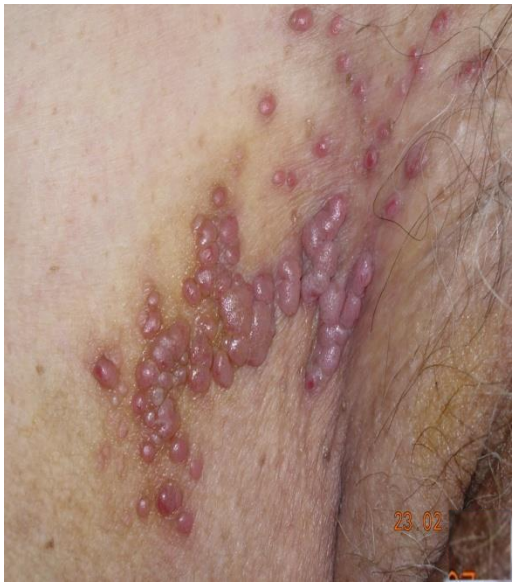




Herpes Zoster / Varicella Zoster

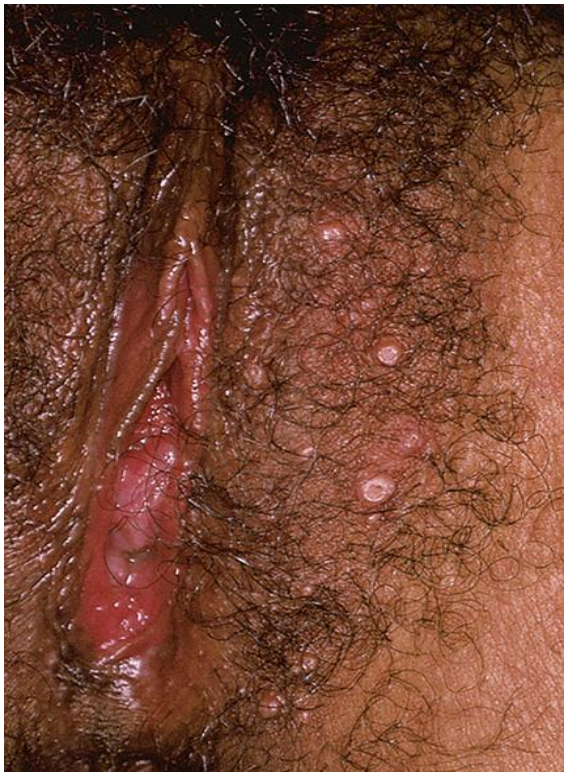
- Caused by Herpes Zoster Virus
- 1° infection is followed by a latent infection
- Lies dormant in a sensory nerve ganglion.
- Reactivation associated with low immunity
- Pain, pruritus, or tingling in a dermatome
- Clusters of papules appear and change into vesicles with an erythematous base.
- Postherpetic neuralgia can be a sequelae
- Management
  - Local topical applications
    - Acyclovir cream, Calamine , Aluminium acetate
  - Antiretrovirals :
    - Acyclovir 800mg five times daily for seven days.
    - More effective if started within 72 hours of onset.
  - Pain management.
    - Analgesic medicines
    - Topical lidocaine
    - May add Amitryptiline

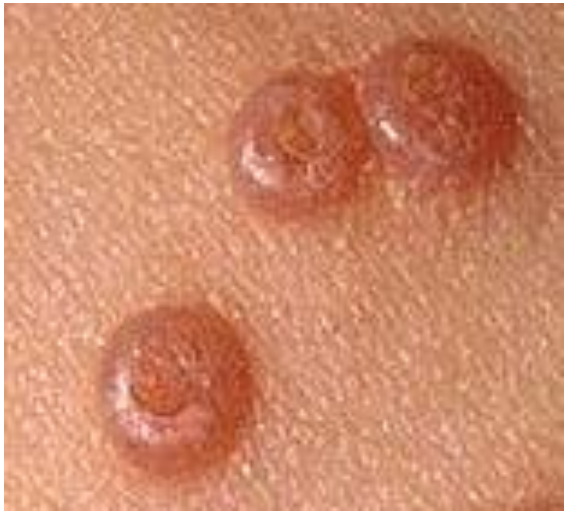




Molluscum Contagiosum

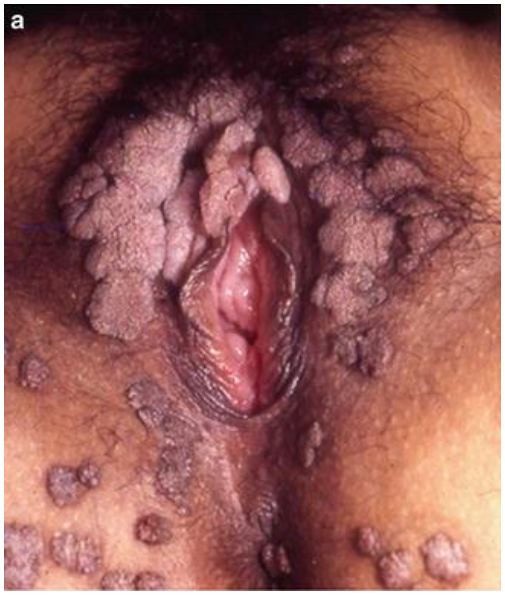
- Contagious, a DNA poxvirus
- related to intimate/sexual contact
- Common among HIV positive
- small, multiple smooth papules, 3-6 mm, with a central umbilication
- Diagnosis is clinical, not require
- Intracytoplasmic inclusion bodies (Henderson–Patterson bodies) on Cytology confirms diagnosis
- Management
  - Regress Spontaneous, 6–12 months
  - Cryosurgery
  - Bichloroacetic acid

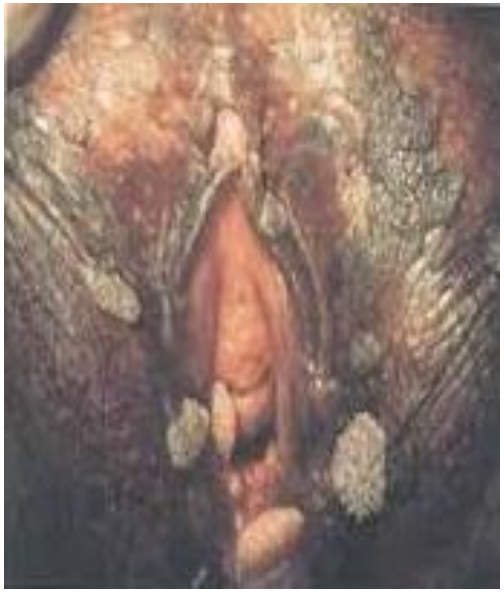




Condyloma acuminate / Genital warts

- Infection with HPV types 6 and 11
- Form cauliflower-like warty growths
- Flat condylomata may occur
- Can grow into huge masses
- 10-15% regress spontaneously
- Association with HIV infection
- Management
  - Local applications to the warts
    - 25% Podophyllin
    - 0.5% Podophyllotoxin (Podofilox. Condylox)
    - Imiquimod cream: Aldara, Zyclara
    - Trichloracetic acid (TCA)
  - Surgical excision
    - Electrosurgery
    - Laser surgery
  - Cryotherapy



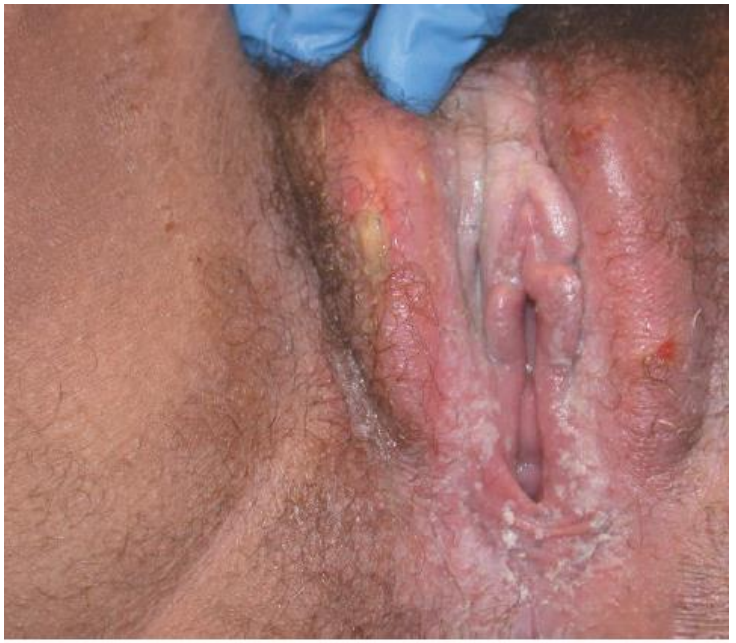


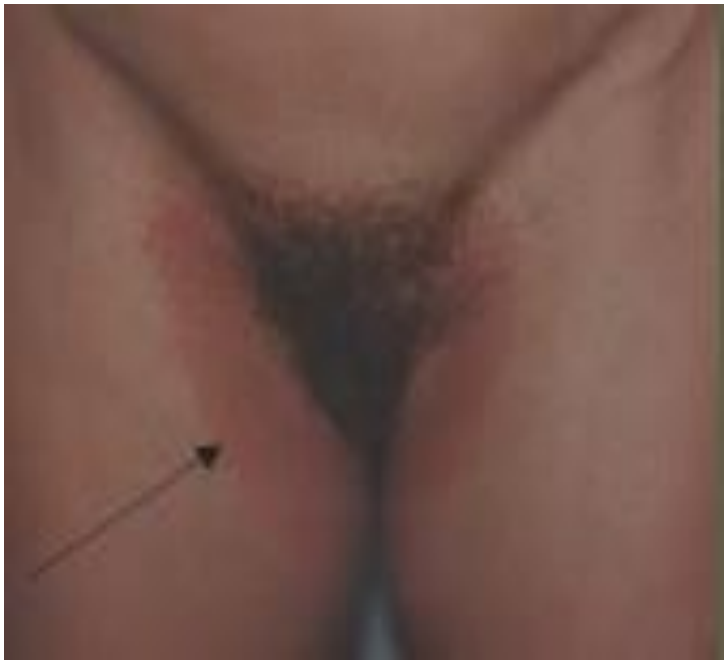
Bacteria

- Staphylococcal Infections
  - Affect hair-bearing areas: labia majora and pubis
  - Warmth, moisture ideal environment for infection.
  - Occlusion, depilation predispose to infection
  - Suppurative Folliculitis
  - Furunculosis (boils)
  - Blisters or pustules
  - Bullous Impetigo
  - Abscess in glands and ducts
- Streptococcal Infections
  - Superficial cutaneous infection
  - Necrotizing fasciitis
- Tuberculosis

Fungi

- Candidiasis
- Fungal dermatitis
- Tinea Vesicolor
- Tinea Cruri
- Treatment
  - Antifungal cream
  - Oral antifungal



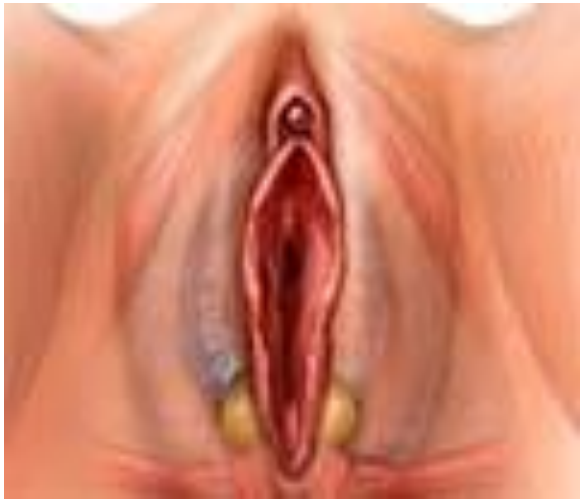


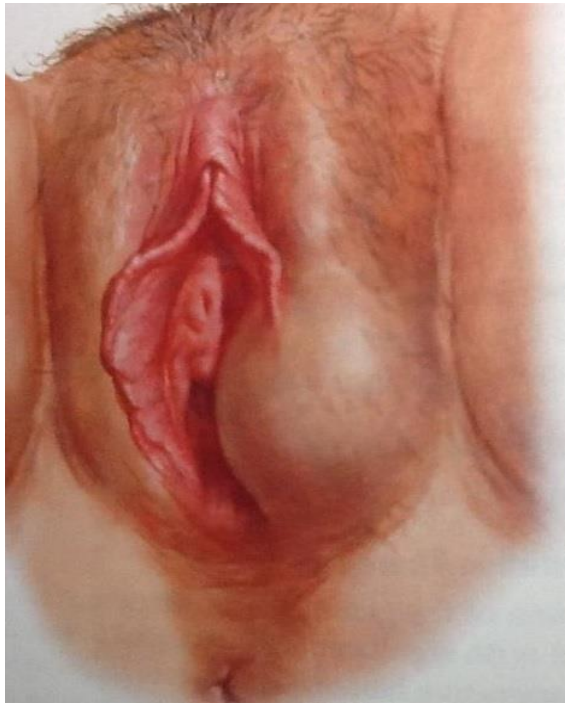
2). Benign cystic tumors

- Caused by blockage of ducts
- Exclude Chlamydia and gonococcal infection
- Have a tendency to become infected
- May arise from the
  - Minor and Major vestibular glands
  - Remnants of mesonephric duct
  - Remnants of the urogenital sinus
- Common cysts
  - Bartholin cyst
  - Skene duct cyst
  - Epidermal inclusion cyst
  - Gartner's Cyst

Bartholin's Cyst

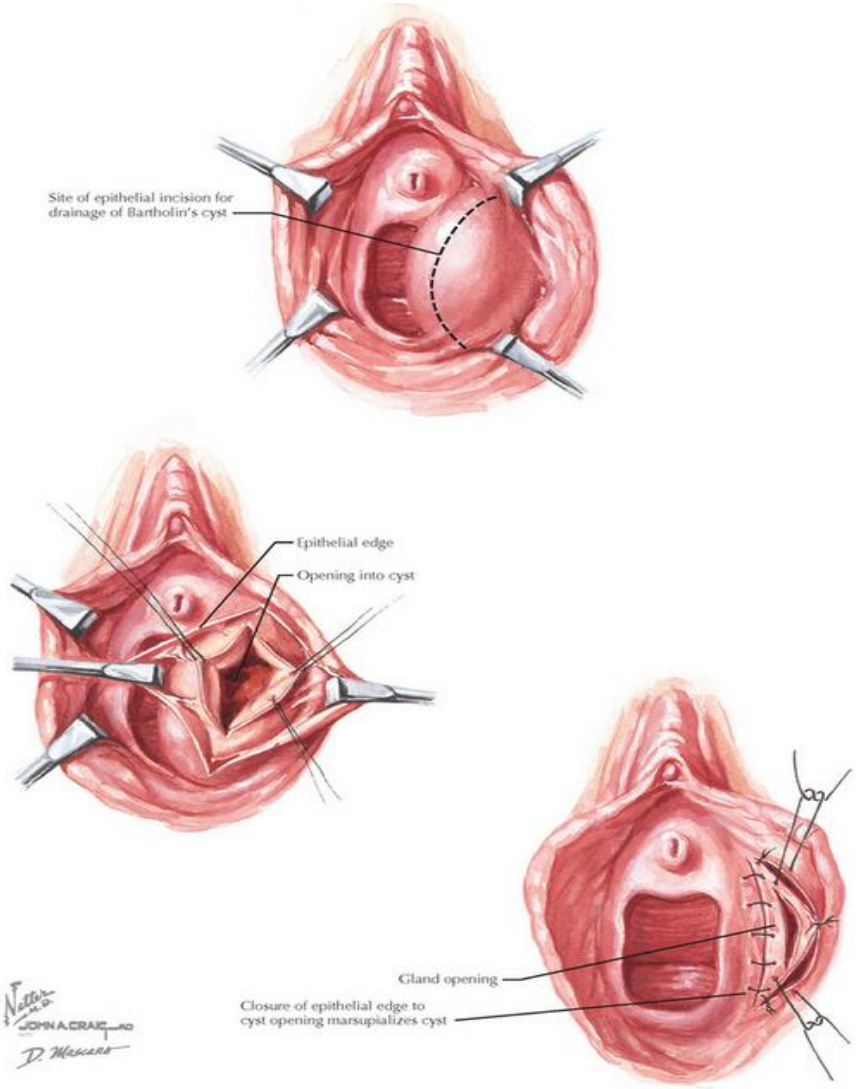
- Bartholin's glands are major vestibular glands
- Situated at 5 and 7 o'clock
- Results from duct blockage
- painless lump next to the vaginal opening near anus.
- contain mucoid material
- If an abscess develops the lump is painful.





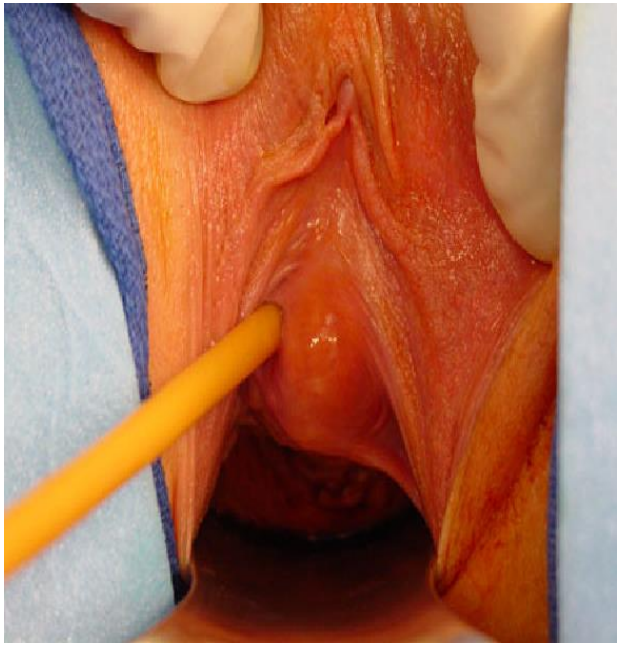
Bartholin's Cyst - Management

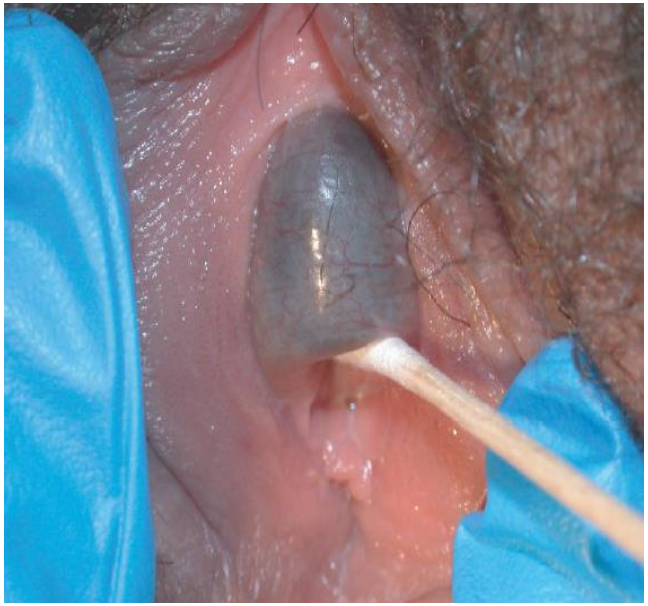
- Incision & Drainage
  - Infected Cysts
- Marsupialization
  - for cysts that persist
- Surgical excision
  - Recurring cysts
  - in older patients
- Give antibiotics
  - if infected



Skene's Cyst

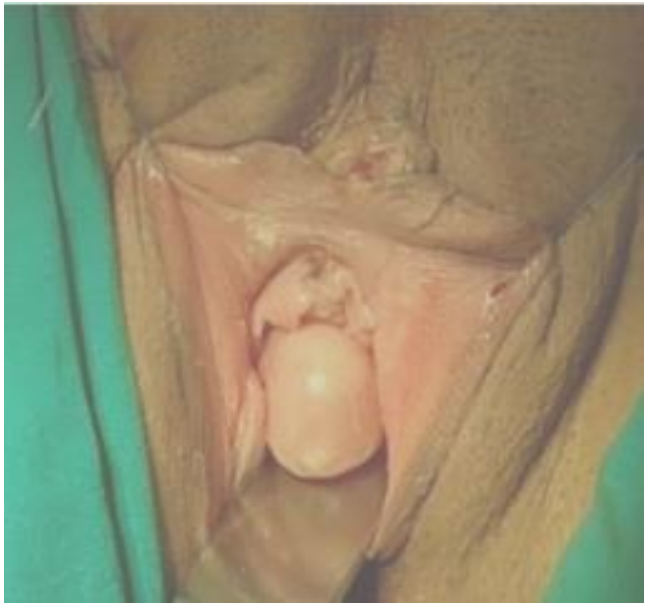
- Skene's glands are next to the opening of the urethra
- result of ductal occlusion.
- form a subepithelial masses
- Some may be pedunculated
- Presents with pain, problems urinating, UTI.
- May disappear spontaeously
- Treatment, if needed is by Surgical excision.

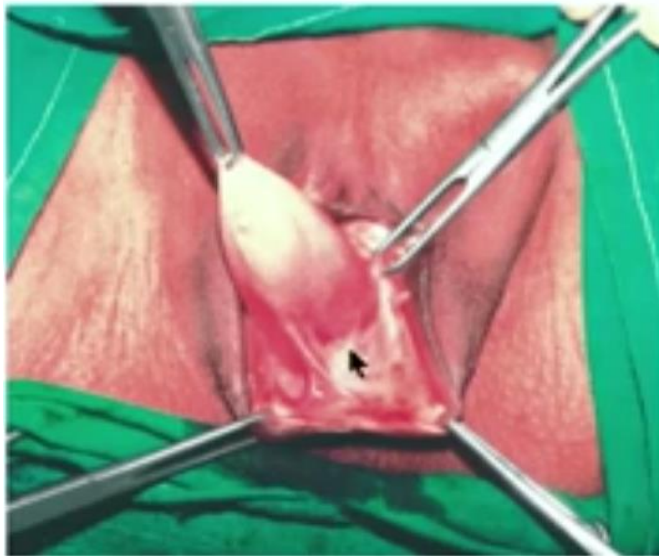




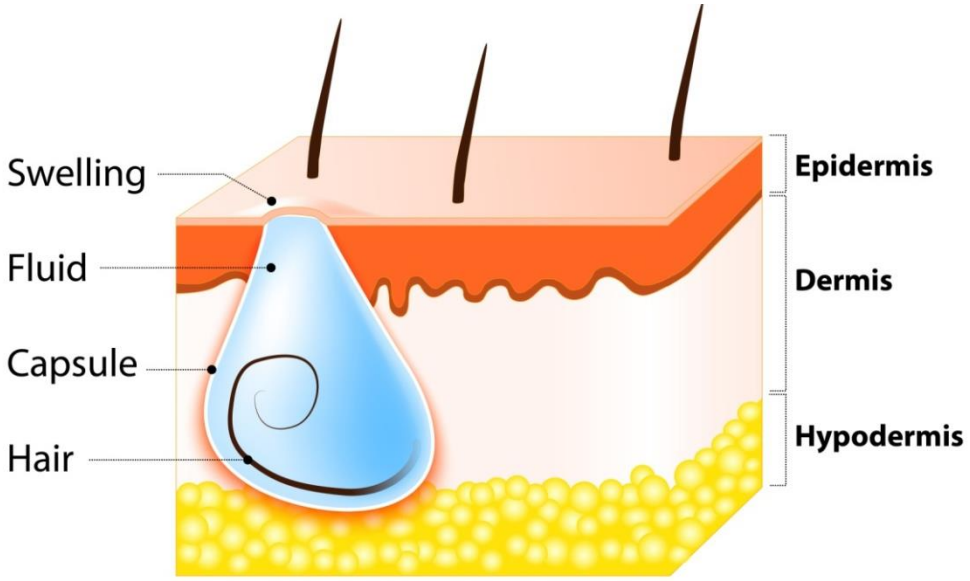
Gartner's Cyst

- An embrological remnant
- Found on anterolateral walls of the vagina
- Contains mucinous material
- Managed by surgical excision



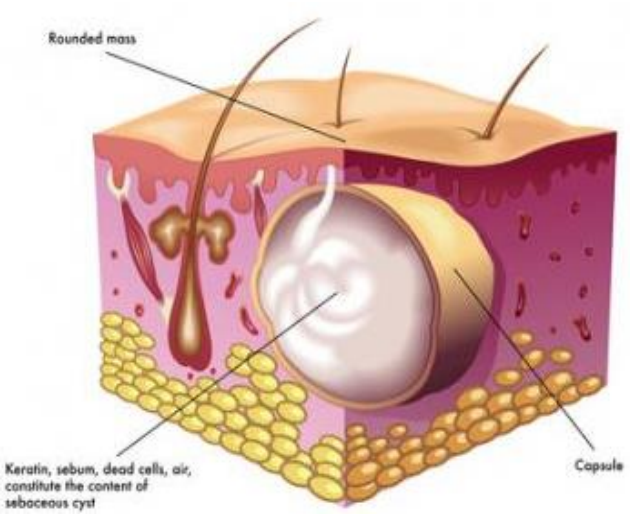


Epidermoid cysts

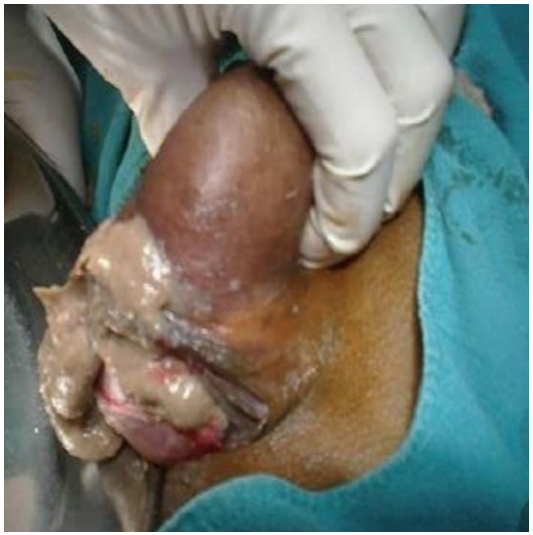


- Occur as masses in hair-bearing areas
  - Areas have sebaceous, apocrine (scent) and eccrine (sweat) glands.
- Main types of epidermoid cysts
  - Sebaceous cyst
  - Keratinous cyst
  - Inclusion cyst

Sebaceous Cyst



- Caused by obstruction of sebaceous gland
- cyst adherent to overlying skin and has a punctum.
- lined by keratotic squamous epithelium.
- Contain greasy grey material
- Contents cause foreign body type granulomatous reaction.
- When infected causes pain



Inclusion cysts

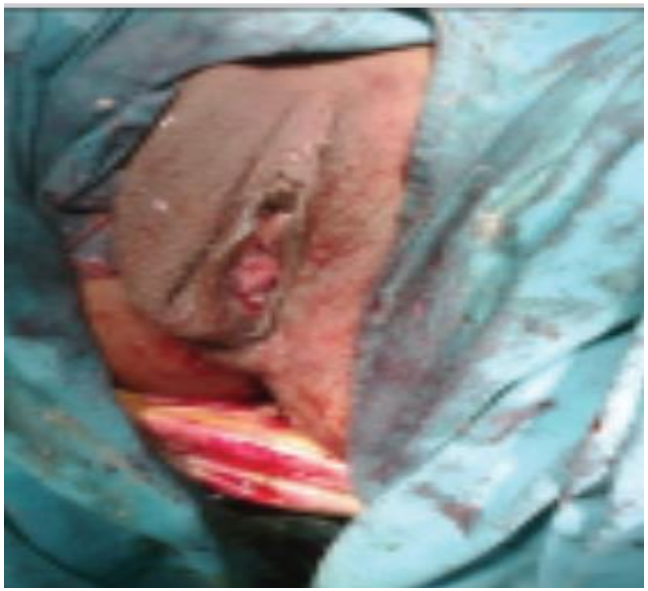
- Causes include
  - Trauma and in-folding of skin edges
    - Tears of vulva
    - Episiotomy repair
  - Female genital mutilation
  - Fusion of epidermal structures at embryogenesis.

Management of Epidermoid Cysts

Complete surgical excision

- To treat the tumors
- For histological diagnosis
- To rule out malignancy.

- Antibiotics if infected

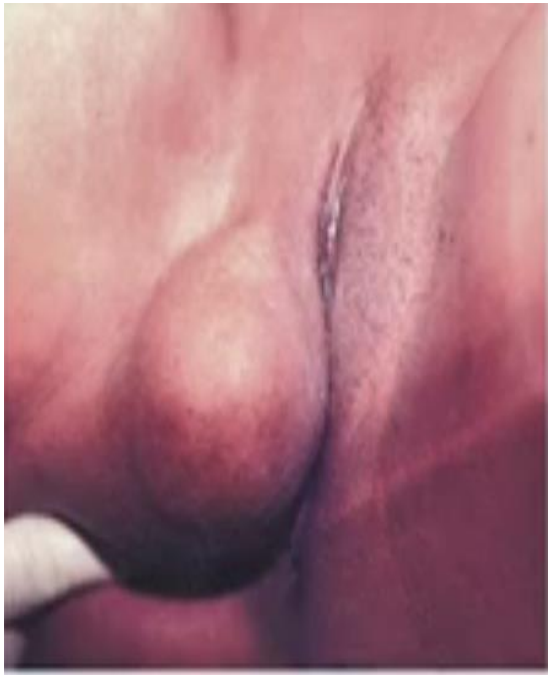


3). Benign solid tumors

- Non-cancerous tumors of the vulva
- Common benign solid tumors are
  - Lipomas
  - Fibromas
  - Haemangioma
  - Skin Tags
  - Hymenal tags
- Excisional biopsy often performed
  - To treat the tumors
  - To diagnose the tumours
  - To rule out the possibility of cancer.

Lipomas

- may be sessile or pedunculated
- are soft, rounded and lobulated
- mostly found in labia majora
- unlike sebaceous cysts
  - not tetherd to overlying skin
  - there is no punctum
- Histology
  - formed by mature fat cells and fibrous tissue.
- Treatment is by excision.

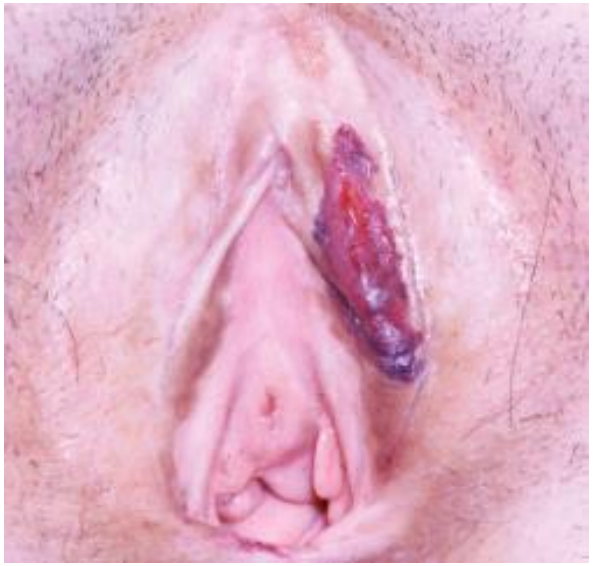


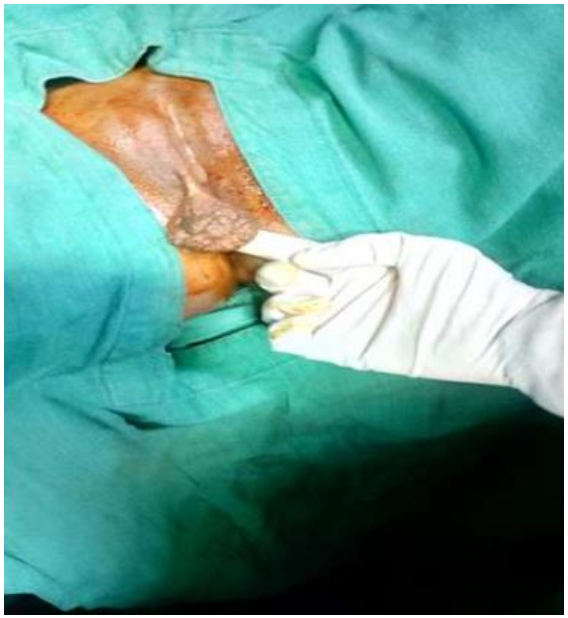
Fibromas

- Usually on the labia majora.
- Composed of dense collagen and fibroblasts
- Occur as sessile or exophytic projections
- Vary in size, Pedunculated can reach ≥10 cm
- Present with discomfort or pain when sitting or coitus.
- Treatment is by excision.

Haemangiomas

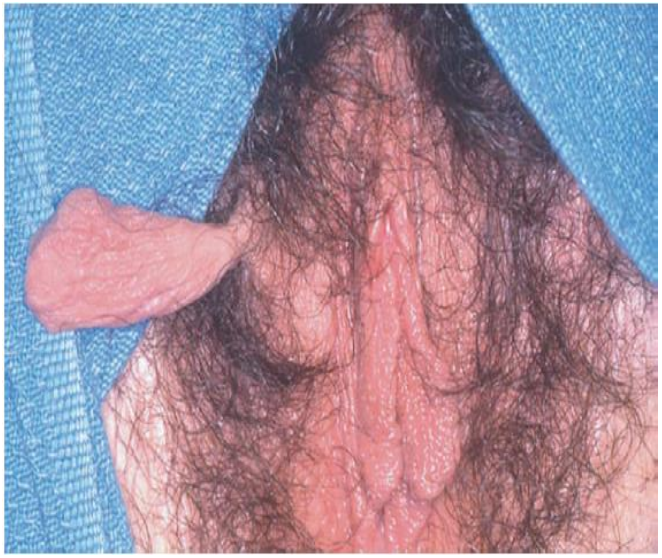
- Start in the blood vessels
- They are of various sizes
- Usually don't need treatment
- Trauma may cause bleeding
- Bleeding can be controlled by
  - Suture
  - Excision
  - Laser therapy
  - Sclerosing agents
  - Cryotherapy





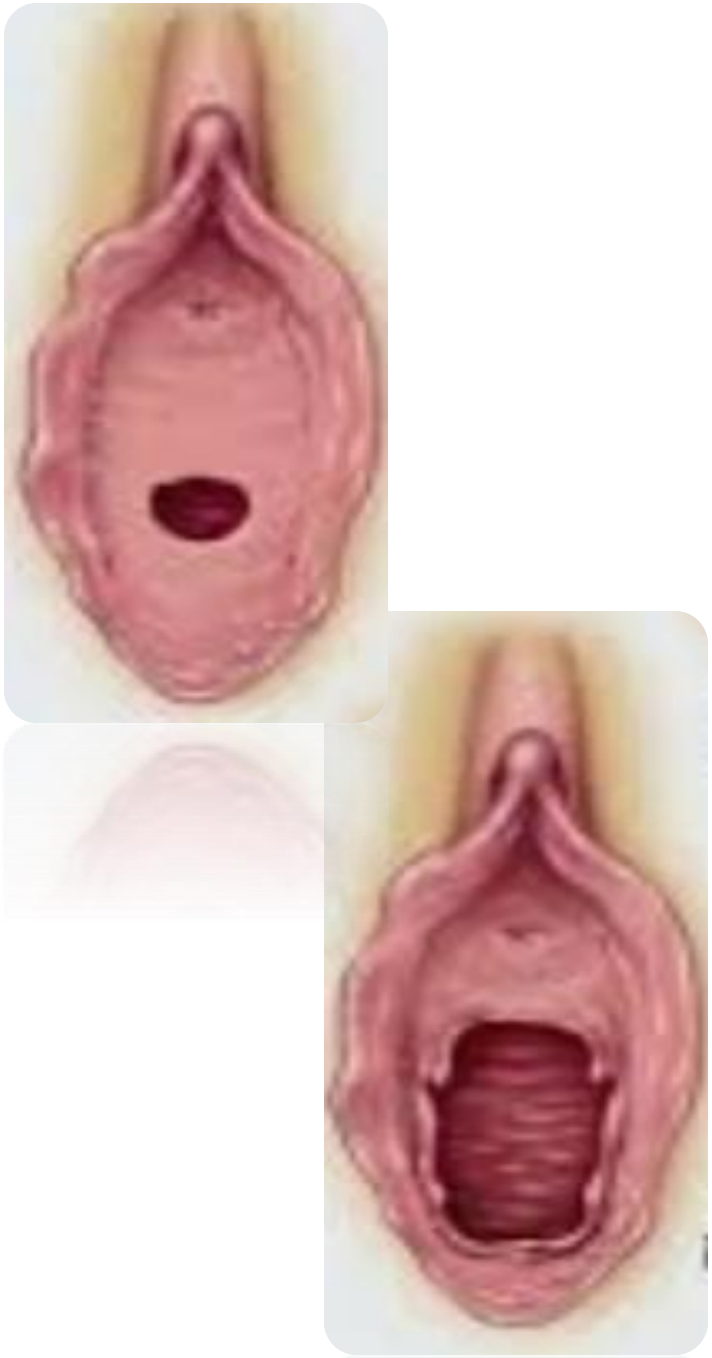
Vulva skin tags

- Present as pedunculated or sessile polyp
- in areas subject to irritation
- Common in obese patients
- Soft flesh fibroepithelial like structures
- Have a vascular core, can bleed if pulled off.
- Lesions irritating and painful
- Managed by ligation and excision



Hymenal remnants

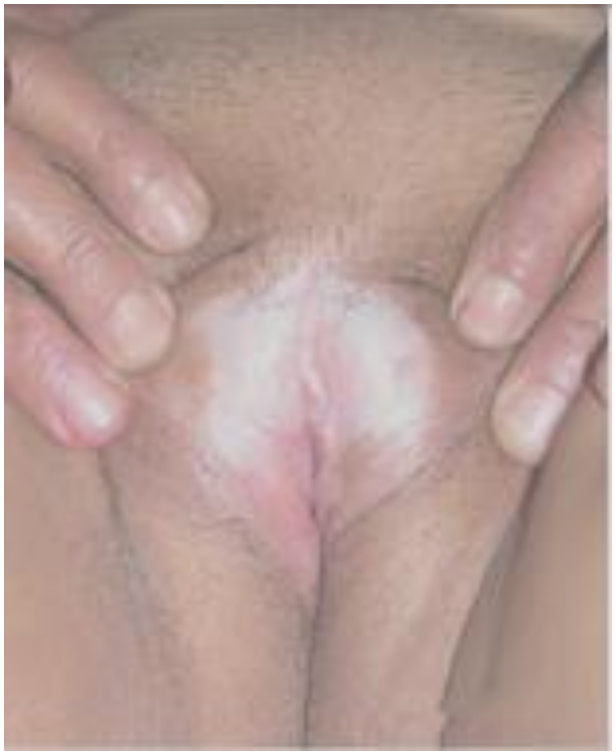
- Vary in size and shape
- Can occur as normal after childbirth.
- Do not usually cause any symptoms
- Can become swollen and painful.
- Surgical removal may be required

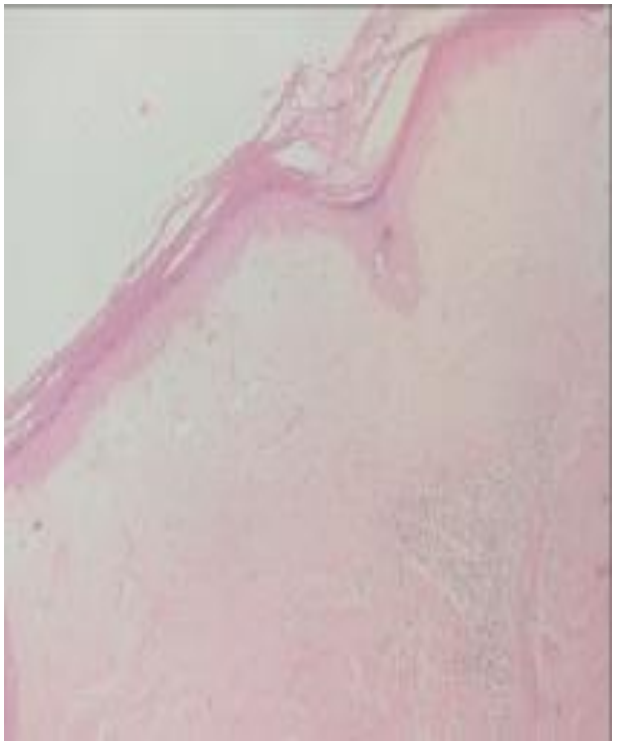


4). Non-neoplastic Epithelial Disorders

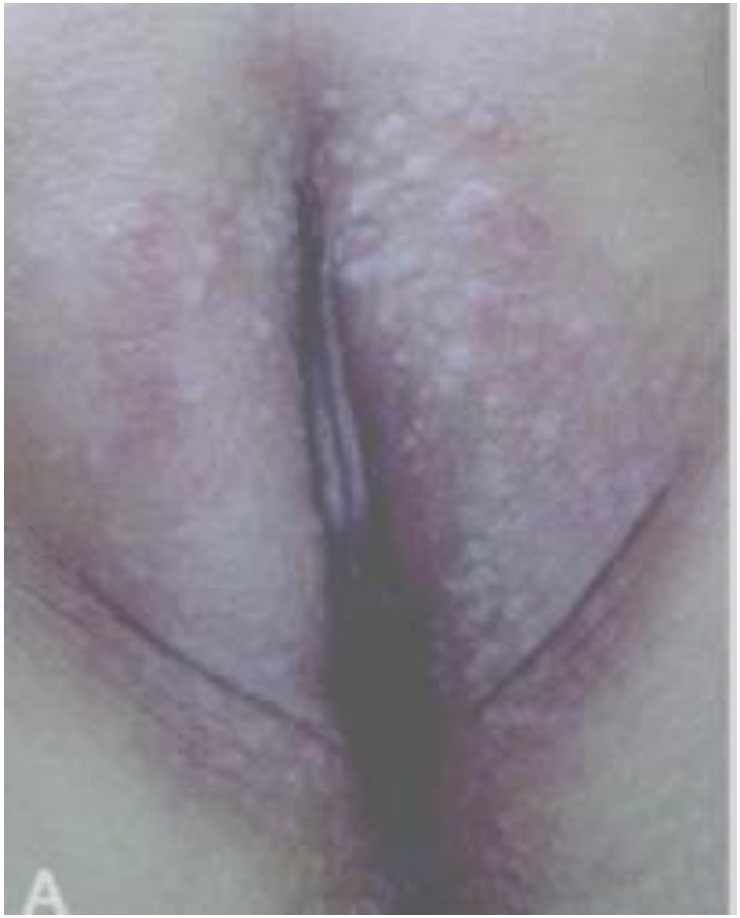
- Vulva atrophy
  - Often found among the elderly
  - Abnormalities represent a physiologic process related to advanced age
- Atrophic Dystrophy
  - Skin is thinned
  - Cigarette paper like or Cellophane appearance
  - e.g Lichens Sclerosus
- Hypertrophic Dystrophy
  - Secondary to chronic irritation
  - Skin thickens and hyperkeratotic, appears white
  - e.g Lichen Simplex Chronicus

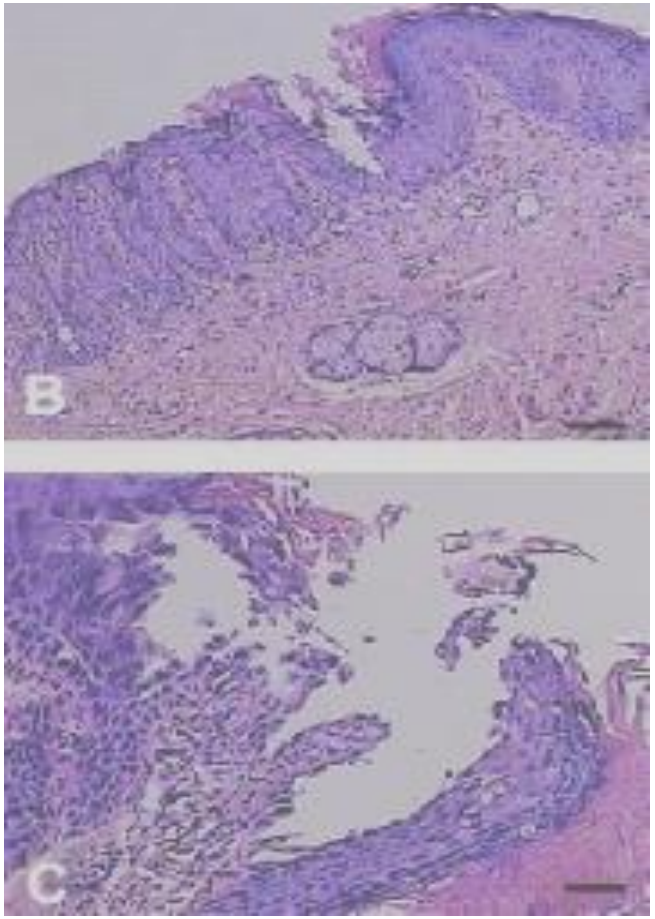
Atrophic Skin





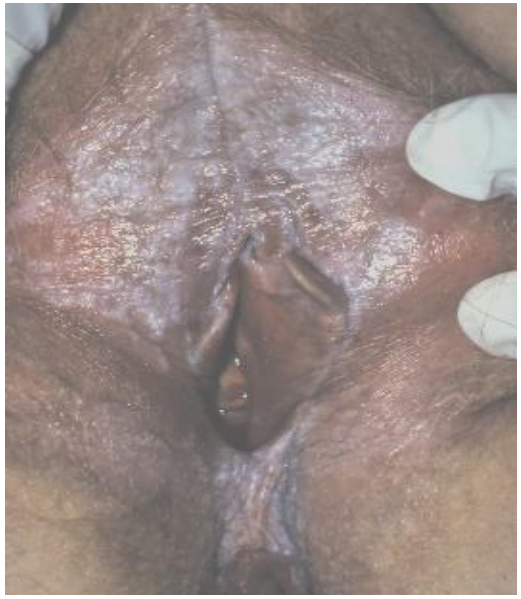
Hypertrophic (Hyperkeratosis) skin

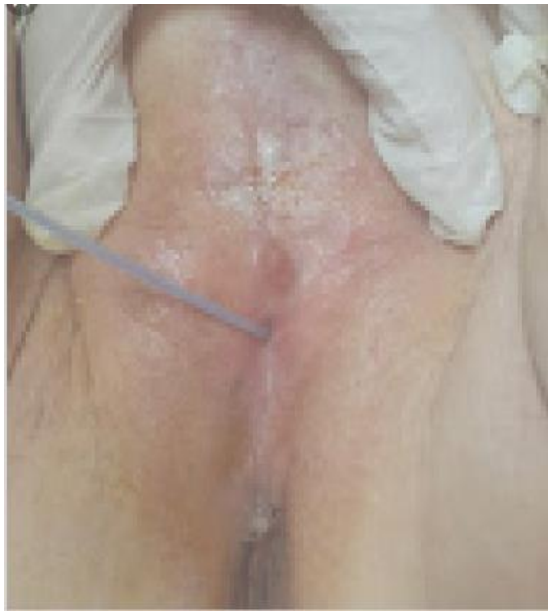




Lichen sclerosus

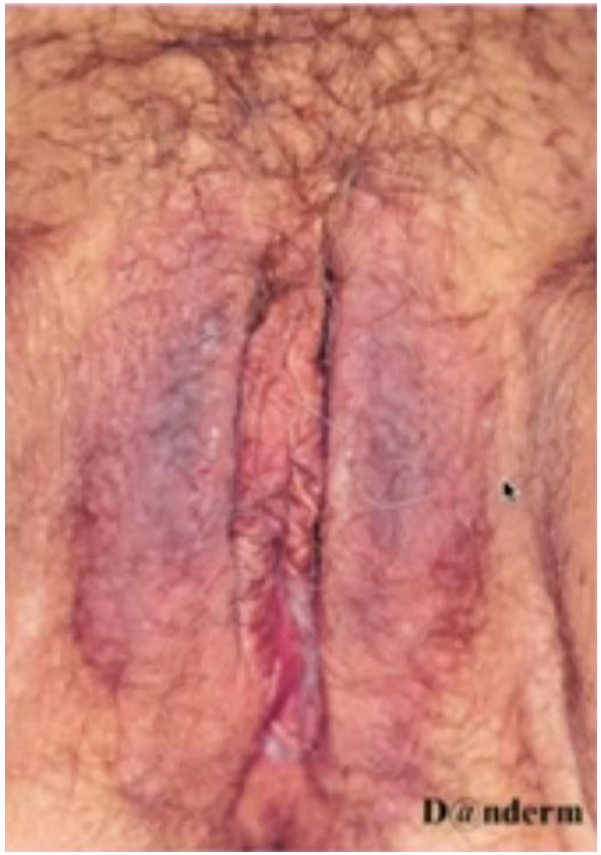
- Skin is thin, cigarette paper like.
- Patchy, diffuse or whole labia
- Etiology unknown - ?Autoimmune ? Genetic ? Enviromental ? hormonal
- Associated with trauma, friction, chronic infection, and irritation
- Familial occurrence in 22%
- Prevalent in postmenopausal age
- Get itch, burning pain, dyspareuina
- May lead to adhesions and Stenosis
- 5% get cancer of Vulva in12 years
- Biopsy and very close follow-up
- Management :
  - Corticosteroid creams
  - Immunomodulators
  - Surgery
    - if Severe, recurrent, malignant change





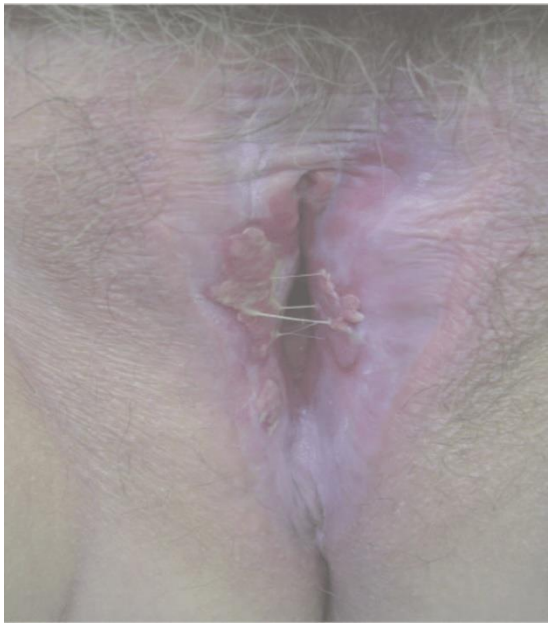
Lichen chronicus

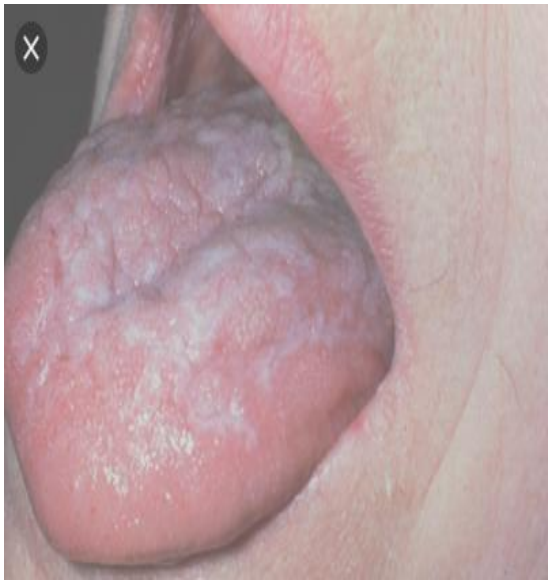
- A localized neurodermatitis
- End stage of itch-scratch-itch cycle by any itching disease of the vulva
  - Initial stimulus may be dermatitis, vaginal discharge, tinea, psoriasis etc
- Irritant may have been transient
- Bilateral, discoloured, thickened skin
- Excoriation, 2° bleeding or infection
- Management
  - Remove the trigger
  - Manage the itch
    - Antihistamines esp at night
  - Topical Corticosteroids
    - Betamethasone
  - Sitz baths
  - Clip the nails



Lichen Planus

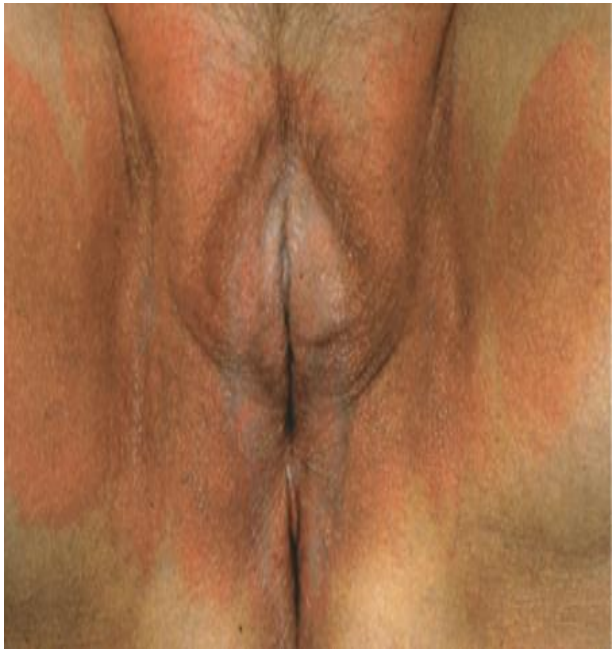
- Can be acute or chronic
- Affects skin, mucous membranes
- on flexor surface and buccal area
- Lesions may be hypertrophic
- Vulval lesions with associated adhesions and yellow exudate,
- Cause is unknown,
  - May be T-cell Autoimmune Ds
  - Some drugs induce lichen planus type eruptions.eg ACE inhibitors
- Management
  - Remove irritant
  - Corticosteroids





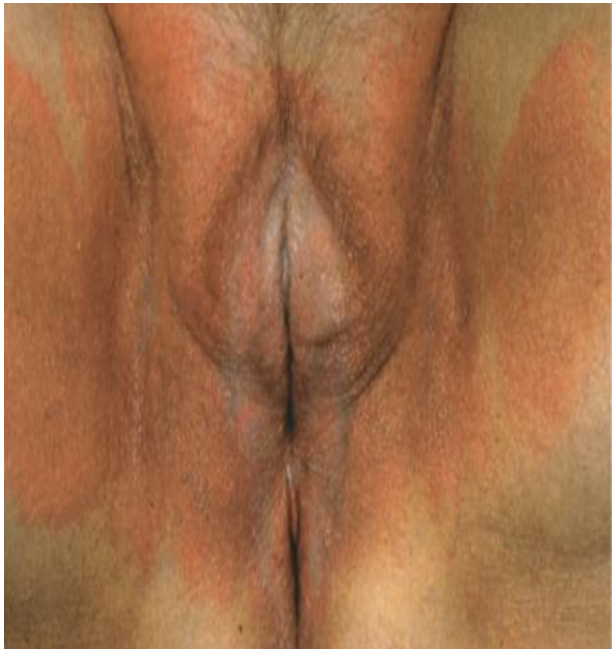
Primary dermatitis

- Pruritus and irritation in the absence of any immune reactivity
- Chemical agents that remove surface lipids, denature epidermal keratins, or damage cell membranes causing irritation.
- Obsessive cleaning of the vulva area may cause irritation.
- Irritation may arise as a result of friction from tight clothing,
- Synthetic fabrics traps moisture
- Activities such as cycling and horseback riding.
- Common irritants include
  - perfumed soaps, bubble baths, bath oils,
  - hygiene products : tampons, pads, diapers, wipes, deodorant sprays, colored or scented toilet paper
  - detergents, fabric softeners,
  - physically abrasive contactants : face cloths, sponges
  - body secretions : urine, semen



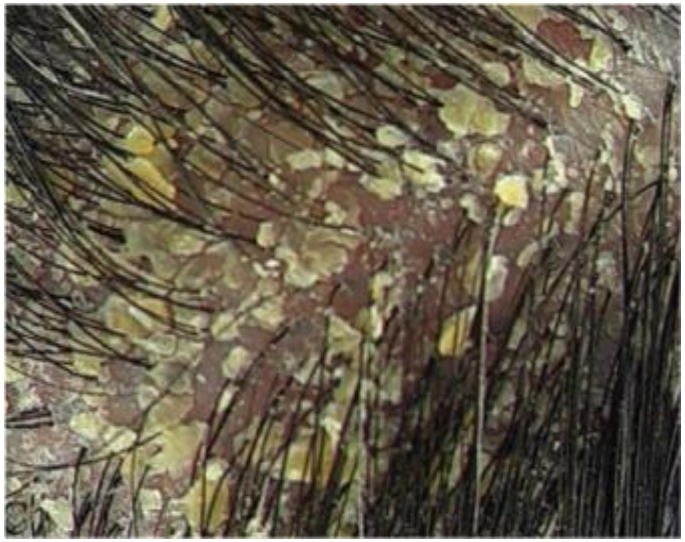
Allergic / Atopic dermatitis

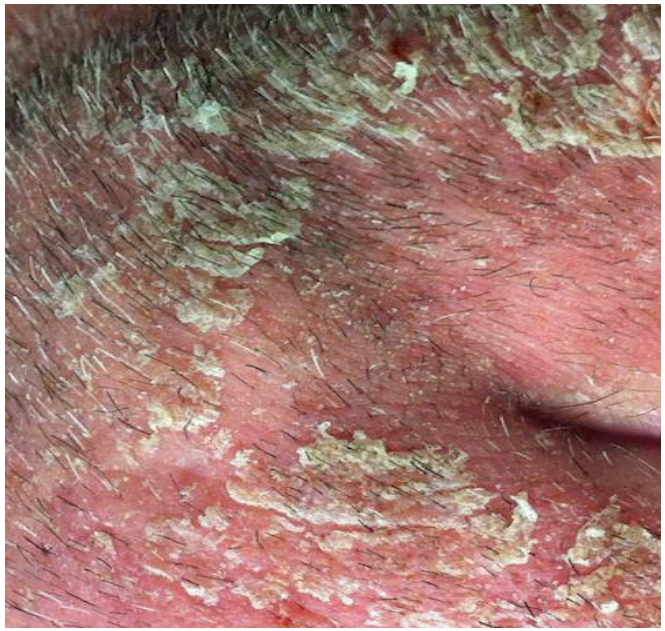
- inflammatory disorder from local contact with agent to which previously sensitized,
- Result of a delayed, cell-mediated, type IV hypersensitivity reaction.
- develops 12-48 hrs after exposure.
- Pruritus may coincide with generalized allergic symptoms.
- May have a personal or family history of asthma, hay fever, eczema
- Allergens include hygiene products
  - Clothing dyes
  - Lotions and moisturizers - Lanolin
  - Nail polish
  - Soaps, and cleansers
  - Sanitary towels
  - Perfumes - Balsam
  - Latex Rubber - Gloves, Condoms, diaphragms
  - Antiseptics - Hexachlorophene
  - Nickel – snaps, zippers in jeans, underwear
  - Antibiotics - tetracycline, sulfonamides,



Seborrheic dermatitis

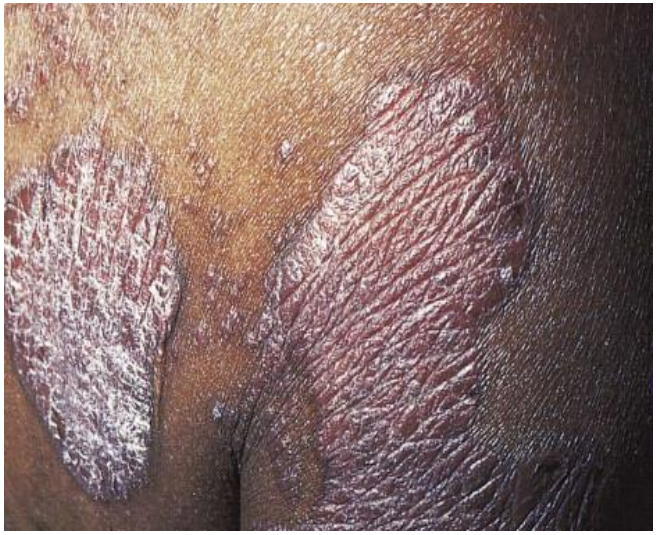
- Affects hair-bearing parts with active sebaceous glands
- less common in the vulva
- Erythematous inflammation with loose yellow-white or gray flakes
- pruritus, irritation, dry feeling
- Cause is unknown.
- Associated factors
  - Androgens activity
  - Yeasts : Pityrosporum Malassezia
  - HIV infection
  - Emotional stress,
  - Zinc deficiency
- Management
  - Anti-fungal anti-proliferative shampoos
    - have pyrithione zinc, ciclopirox, selenium sulfide, ketoconazole
  - Corticosteroids
  - Keratolytic (salicylic acid) ointments

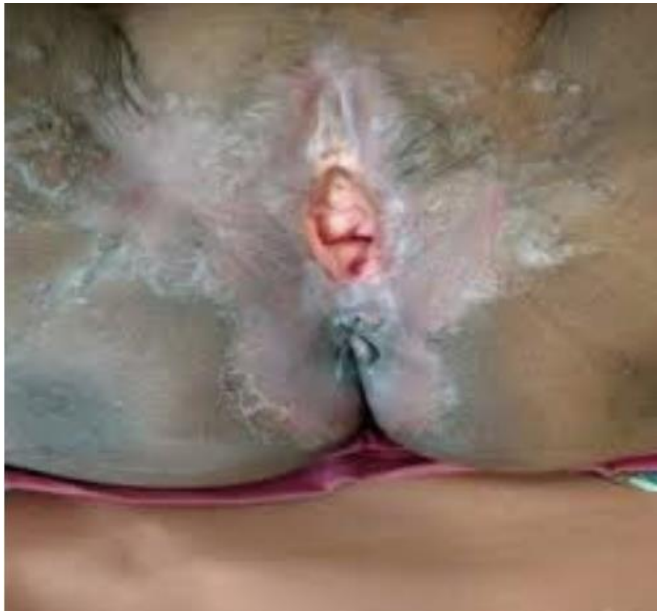




Psoriasis

- Hereditary disorder of the skin
- 2° excessive cell turnover
- Thickened erythematous red plaques on skin covered by silver-white scales
- Rarely vulva involvement occurs
- Sites of repetitive trauma, and skin folds eg scalp, elbows, forearms, knees, hands
- Triggered or exacerbated by local factors
  - irritation from scratching, irritant soaps,
  - bacterial or yeast superinfections
  - heat and humidity
  - Tight synthetic clothing
  - sanitary napkins., menses
  - nervous stress
- Pruritus may be minimal or absent,
- diagnosed by skin findings alone.
- Lesions persistent
  - (don't come and go as observed in Eczema)



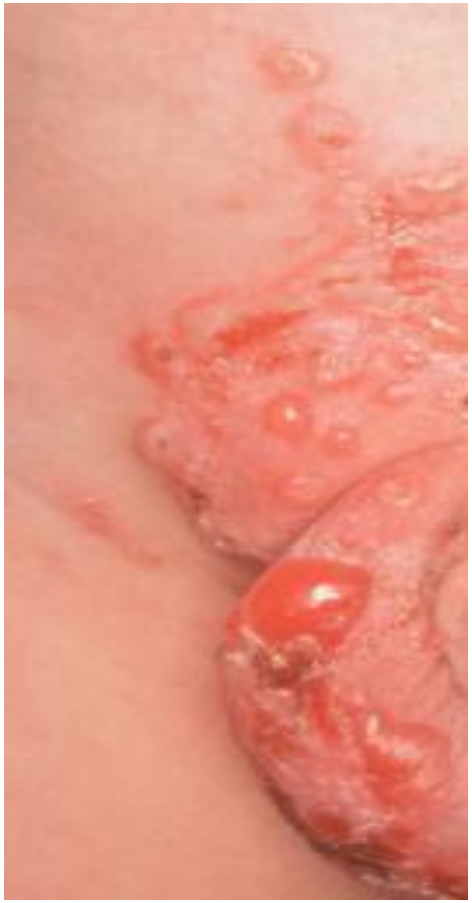


Treatment of Psoriasis

- Topical corticosteroids
- Vitamin D analogues
- Phototherapy with UV light
- Photochemotherapy
- Immunomodulators
  - Efalizumab, Infliximab, Alefacept
  - Newer, lack data on long-term safety and efficacy

Blistering disorders

- Autoimmune disorders
  - antibodies to elements of the skin
- Types
  - Familial pemphigus
  - Bullous pemphigoid
  - Cicatricial pemphigoid
  - Pemphigus vulgaris
  - Erythema multiforme
  - Epidermolysis bullosa
- Characterised by recurrent eruptions of vesicles and blisters
- Mostly occur in the anogenital area
- Vulva problems are be common
- Trigger factors :
  - friction, infections, irritants, increased temperature, humidity, UV light



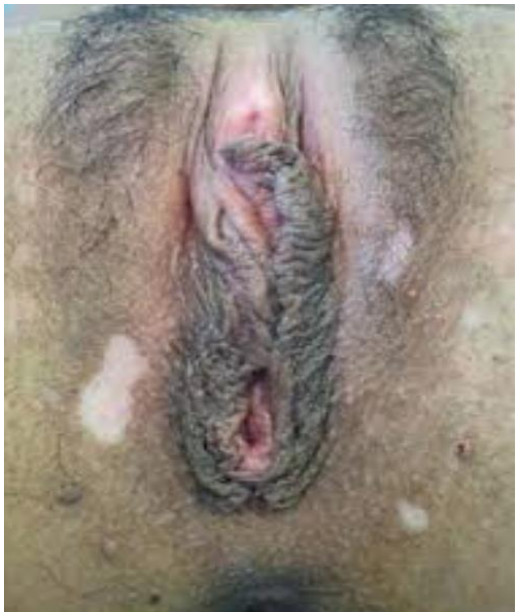
Pigmentary changes

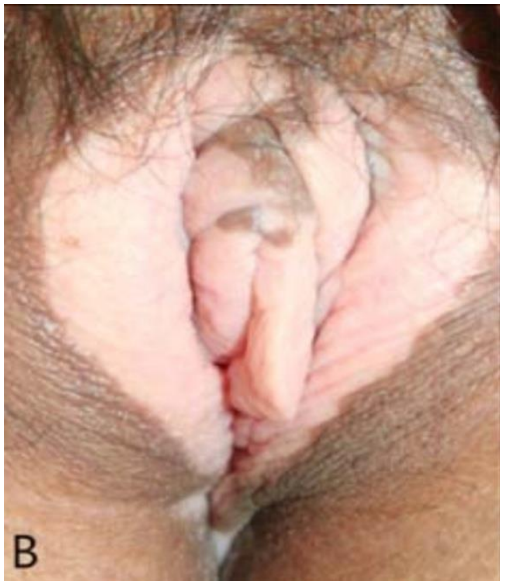
- Acanthosis nigricans
- Lentigo and lentiginosis,
- Benign vulvar melanosis
- Melanocytic nevus
- Postinflammatory hyperpigmentation
- Postinflammatory hypopigmentation
- Scleroderma
- Vitiligo
- Vulvar melanosis

Pigmentary changes

Vitiligo

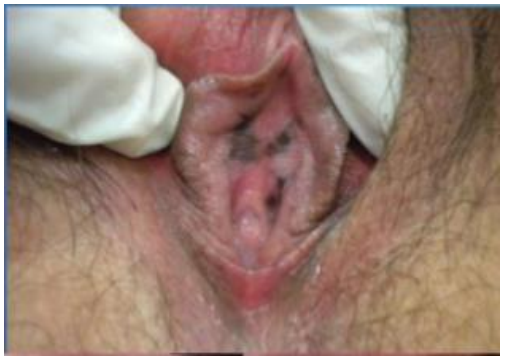
- Acquired loss of pigmentation
- Secondary to immunologically mediated melanocyte damage.
- Genital involvement common
- Other body parts also affected

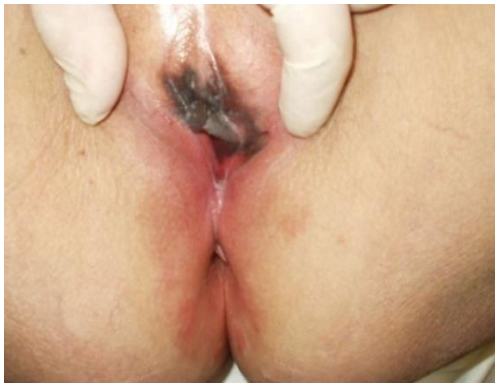


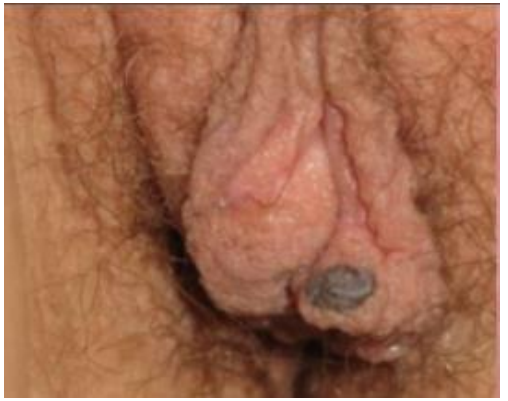


Melanosis and Melanocytic Nevus

- Vulva nevi are fairly common
- Nevus cells derived from the neural crest migrate into skin during embryogenesis and collect in basal cell layer
- The cells proliferate in small nests in dermis.
- Appear as dark lesions
- Can progress to Melanoma
- Biopsy if Nevus has irregular border, variable colour

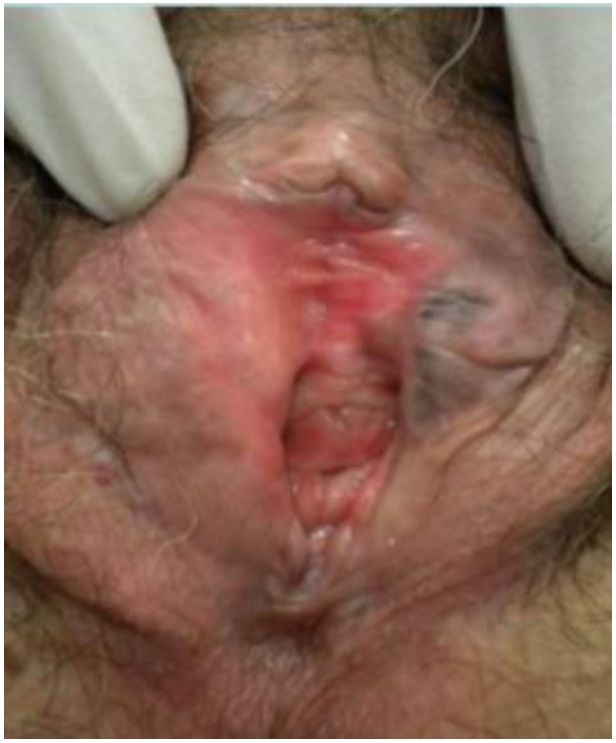






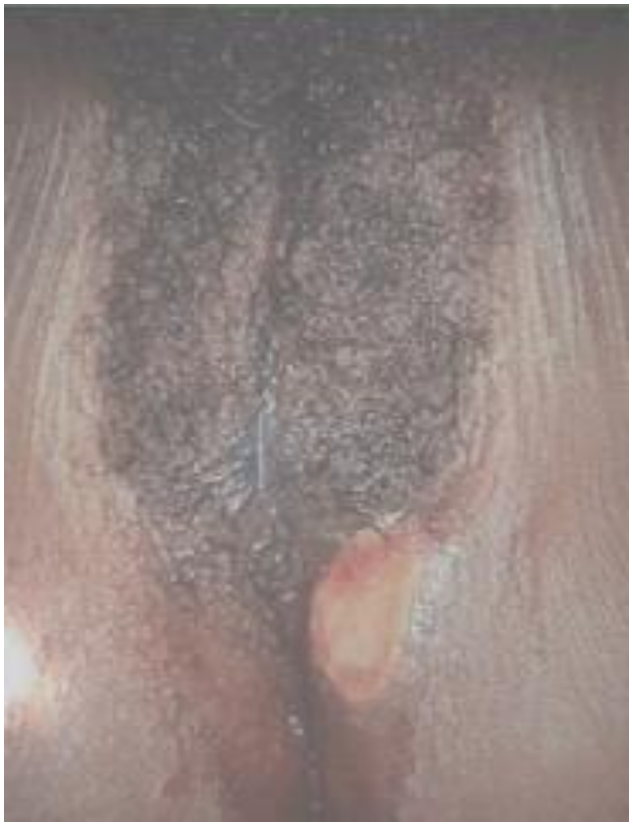
Physiologic and Post inflammatory Hyper- and Hypo - pigmentation

- Observed within healing scar tissue
- May clear spontaneously



5). Ulcerative disorders

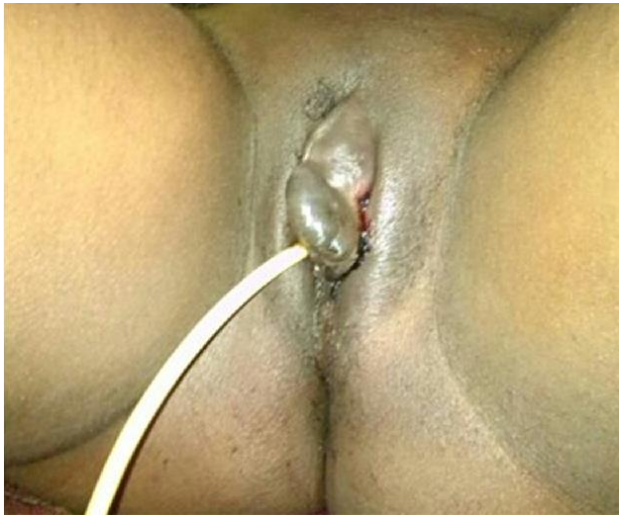
- Example
  - Syphilis, Chancroid, Granuloma inguinale, LG Venerum
- Primary Syphilis
  - highly contagious STI
  - by spirochete *Treponema pallidum*
  - coinfection with HIV recognized.
  - Primary lesions (chancre) is painless indurated, shallow, clean solitary ulcers with raised edges.
  - LNs enlarged, firm, not tender
  - Labs
    - Positive RPR, VDRL, Dark stain
  - Management
    - Benzathine Penicillin



6). Other conditions

Vulva Hematoma

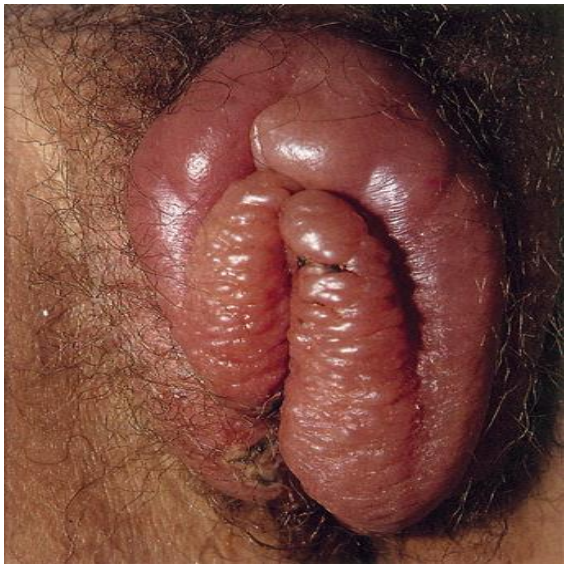
- Often from Trauma
- Management
  - Incision & drainage
  - Foley catheter
  - Ice compresses
  - Rest
  - Resolves in 2-3 wks



Vulva Oedema

Causes include

- 2° to medical conditions
  - CCF
  - Portal hypertension
- Obesity
- Contact dermatitis
- Tropical diseases
- Following surgery
- STI
- Manage underlying cause



Systemic diseases with vulva manifestations

- Lupus Erythematosus
- Pemphigus
- Contact dermatitis
- Dermatitis medicamentosa
- Psoriasis
- Diabetes Mellitus Vulvitis
- Behcets Syndrome
- Leukemias
- Acanthosis Nigricans

Diagnosis

History

- Ascertain whether the lesion is vulval, vaginal or perianal
- Complaints : Pain, discomfort, irritation, itch, dyspareunia, discharge
- Whether symptoms sudden or gradual in onset., recurrence
- What worsens, symptoms? What improves Symptoms?
- Symptoms ? when : through out, sitting, during coitus.
- Whether the partner has any similar complaints.
- Other Complaints : Dysuria, urinary frequency
- Current problems such as psoriasis, chickenpox
- History of trauma
- Review irritants
  - Hygiene, Soaps, Douching, Pads, Shampoos, creams, Dyes
  - Detergents, Scented Perfumes, Foods
  - Spermicides, Latex Condoms, Exposure to Semen
- Personal or family history of atopy : eczema, asthma,
- Recent use Medications, of antibiotics
- History of chronic illness : Diabetes, Crohn's
- Review PMHx. Surgical Hx,OBS Hx, Gyn Hx, Menstrual Hx

Examination

- Thorough examination with adequate lighting
- Systematic physical exam of abnormal lesions
  - Boarder asymmetry
  - Number
  - Color
  - Distribution
- Examination of the rest of the body, including
  - Mouth, scalp, elbows, knees, Nails, conjunctiva
  - Lymph nodes r/o TB or malignancy.
  - Systems Exam

Investigations

- Vaginal swab
- Urinalysis
- STIs
- HIV test
- Blood sugars
- Colposcopy
- Vulva biopsy
  - Indications
    - Lesions not responding to medical treatment
    - Hypertrophied lesion
    - Non-healing ulcerative lesions
  - Excisional, wide biopsy
  - Incisional, full thickness

Management

- Stop irritant
  - Scented soaps, Perfumes, Detergents, fabric softeners, Chlorine
  - Products with multiple ingredients
  - Talc Powder or use natural
  - Douching, Latex, Petroleum lubricants, use water based or silicon
- Trim nails to reduce scratching and reduce bacteria
- Wash vulva area with clean plain water
- Use cushion over bikes seats and horse saddles
- Loose fitting cloths, wear cotton or avoid underwear
- Weight control
- Treat underlying disease: DM
- Antipruritics
  - Antihistamines
- Cortecosteroids
  - Betamethasone
  - Clobetasol
- Surgical excision

THANK YOU