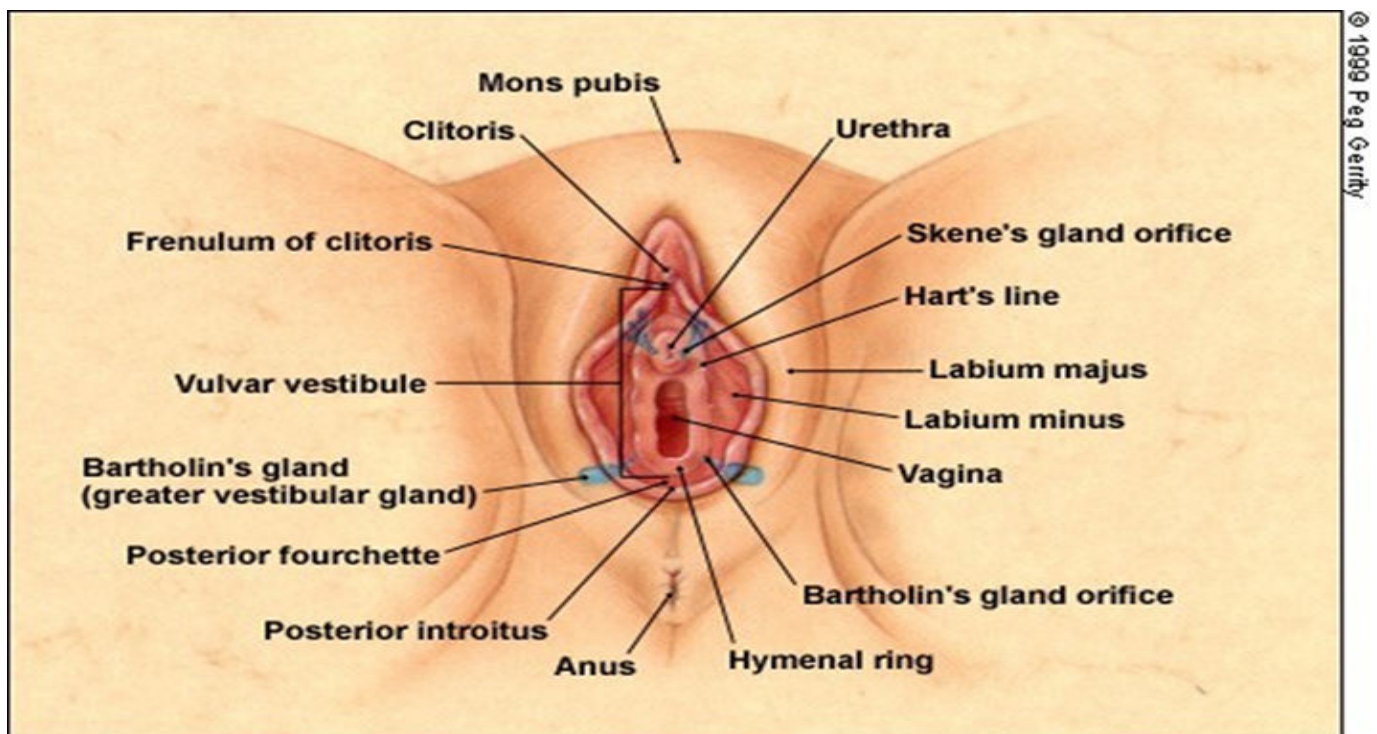


Benign Disease of Vulva

Objectives:

At the end of this lecture the 5th year students should be able to:

- 1-Recognize the anatomy & classifications of abnormal lesions*
- 2- Identify how to assess patient with abnormal lesion or mass in vulva.*
- 3-Recognize the normal & abnormal findings seen in the vulva.*
- 4- Describe the presentation and management of common benign conditions of the vulva*
- 5- Understand the impact of vulval conditions on sexual function.*



Anatomy:

-The vulva is the area of the perineum including the Mons pubis, labia majora and minora and the opening into both the vagina and urethra .

-Anteriorly labia majora and minora come together to form the prepuce of the clitoris and posteriorly they form the forchette.

-The vulval vestibule is the area between the lower end of the vaginal canal at the hymenal ring and the labia minora, bartholin gland is the major glands of the vestibule and lie deep within the perimeum.

-Classification of vulval disorders:

- *Benign lesions of the vulva are mentioned in three categories:*

1. Epithelial conditions (Non neoplastic Vulvar Dermatoses).

2. Benign neoplastic disorders.

3. Dermatological disorders.

- *Vulvar intraepithelial neoplasia(VIN):*

Sequamous vaginal intraepithelial neoplasia-

VIN1(mild dysplasia)

VIN2(moderate dysplasia)

VIN3(sever dysplasia)or carcinoma in situ.

-Non sequamous VIN Pagets disease

- ***Assessment of patients with vulval disease:***

-Vulvar skin is more permeable than surrounding tissues because of differences in structure, hydration, and susceptibility to friction .As a result, pathology involving the vulva is common.

1- History:

- Presenting complaint.

-Current methods of skin care.

-Topical treatments are being used.

-The impact of symptoms on the sexual function.

-Personal and family history of autoimmune disease, atopic conditions (asthma, hay fever).

-Any symptoms of urinary or faecal incontinence(irritating to the skin).

2-Clinical examination of vulval area with good light source.

3- Vulval swabs to exclude infection as a cause of vulval symptoms.

4 -Consider testing for thyroid disease, diabetes if clinically indicated.

5. Skin biopsy : is not necessary when a diagnosis can be made on clinical examination. Biopsy is required if the woman fails to respond to treatment or there is clinical suspicion of VIN or cancer.

• Common vulval symptoms :

1. Vulval pruritus: The term pruritus vulvae properly refers to vulvar irritation for which no cause can be found , is commoner in older women and is most frequently encountered after the age of 40 years.

Vulval pruritus

Vulval pain

Superficial dyspareunia

Infections (e.g. candidiasis, Trichomonas vaginalis)

Infections (e.g. candidiasis) (causes vulval splitting)

Skin conditions (e.g. lichens

skin conditions (e.g. lichen

skin conditions (e.g. lichen

Vulvodinia

sclerosis, eczema, VIN) sclerosis, eczema, VIN)

Contact dermatitis Vulvodynia Vulval fissures

Bartholin gland infection Skin bridges of the vulva

1. Non neoplastic Vulvar Dermatoses :

Classification by International Society for the Study of Vulvar Disease(ISSVD) based on both histopathologic and gross changes.

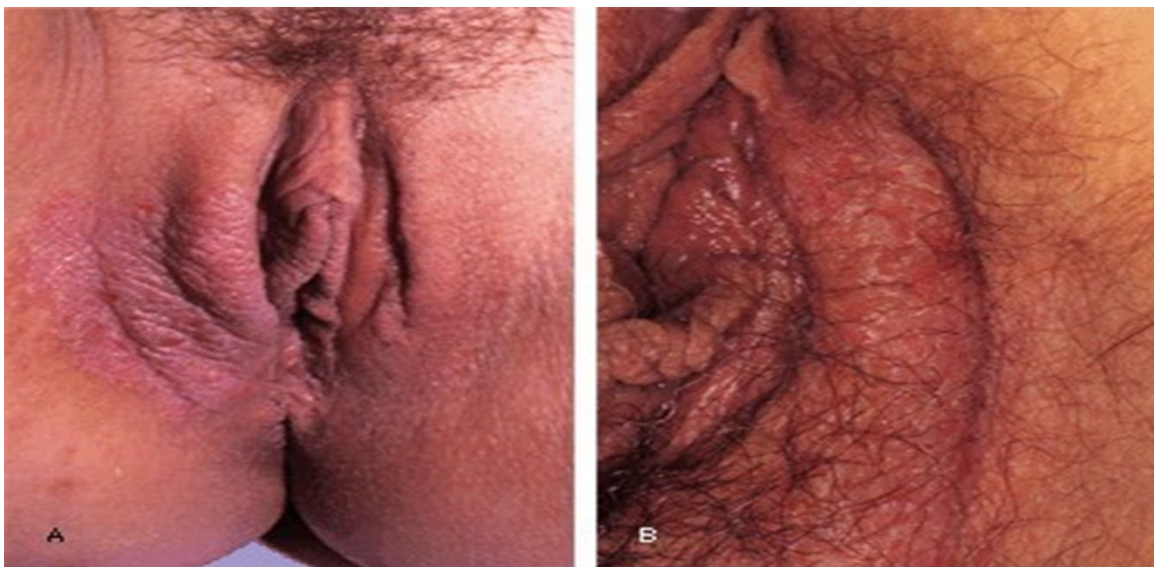
1.Squamous cell hyperplasia(Lichen Simplex Chronicus).

2. Lichen sclerosus

3.Lichen planus.

4. Other dermatoses: Bullous lesions, Ulcerative lesions

1-Squamous Cell Hyperplasia (Lichen Simplex Chronicus):



Lichenification (A) Lichenification and swelling in localized plaque of lichen simplex chronicus. (B) Marked lichenification, erosions, and crusting in lichen simplex

- **It is local thickening of the epithelium resulting from chronic trauma secondary to prolonged itching or scratching as a protective response of the involved skin. Presents with**

pruritus and pain. Signs- whitish or reddish thickened, leathery, raised surface, usually discrete but may be multiple.

- Triggering factors, including chemical substances contained within hygiene products and topical medicines .*
- Topical steroid ointments help to reduce inflammation, whereas lubricants help to restore the skin's barrier function. If symptoms fail to resolve within 1 to 3 weeks, biopsy is indicated to exclude other pathology.*

2-Lichen Sclerosus



- Is a common chronic destructive inflammatory progressive skin disease that predominantly affects the anogenital skin.*
- classically presents in postmenopausal women, but can be seen in children and younger females.*
- the cause remains unknown, but genetic, infectious, hormonal, and autoimmune etiologies have been suggested. association with thyroid disease , pernicious anemia , diabetes.*
- an increased risk of vulvar malignancy squamous cell carcinoma, occurring in about 4-6 %.*

Symptoms: vulvar pruritus -induced scratching creates a vicious cycle leading to excoriations and further thickening of the vulvar skin. Dyspareunia, burning pain.

Signs: Its characteristically presents in a 'figure of 8' pattern around the vulva and anus. There is frequently hypopigmentation, loss of anatomy, vaginal stenosis and cracking (particularly in the posterior fourchette) but appearances can be subtle in early-stage disease thin inelastic atrophic skin, white with a crinkled, tissue paper appearance.

-The characteristic clinical picture and histologic confirmation typically lead to the diagnosis revealed a thin atrophic epithelium with inflammatory cells lining the basement membrane

Treatment:

- **-Vulvar hygiene**
- **-Topical potent Corticosteroids, clobetasol propionate once nightly for 4 weeks, followed by alternating nights for 4 weeks, and finally tapered to twice weekly for 4 weeks. long term therapy with low potent steroids may be nessesory.**

□ **3. lichen planus:**



-Is an inflammatory disease that involves both cutaneous and mucosal surfaces, equally affects men and women between age 30 and 60 year.

- **It is purplish, polygonal , papules that may appear in their erosive form.-**
- **It involves vulva, the vagina, the mouth(vulval –vaginal- gingival syndrome).-**

- *-Unknown cause but it is likely believed to be related to T-cell–related autoimmunity to basal keratinocyte.*
- *-Symptoms and signs: vulval burning , chronic vaginal discharge ,sever dyspareunia when vaginal stenosis develop in advanced stages.*
- *-Treatment: Topical and systemic steroids.*

Vaginal dilators for stenosis

Surgery for severe vaginal synechia

Vulvar hygiene

Emotional support

Causes of benign vulvar ulcer:

Aphthous

Herpes genitalis

Syphilis

Crohn disease

Lymphogranulomavenerum

Chancroid

Donovanosis

Tuberculosis

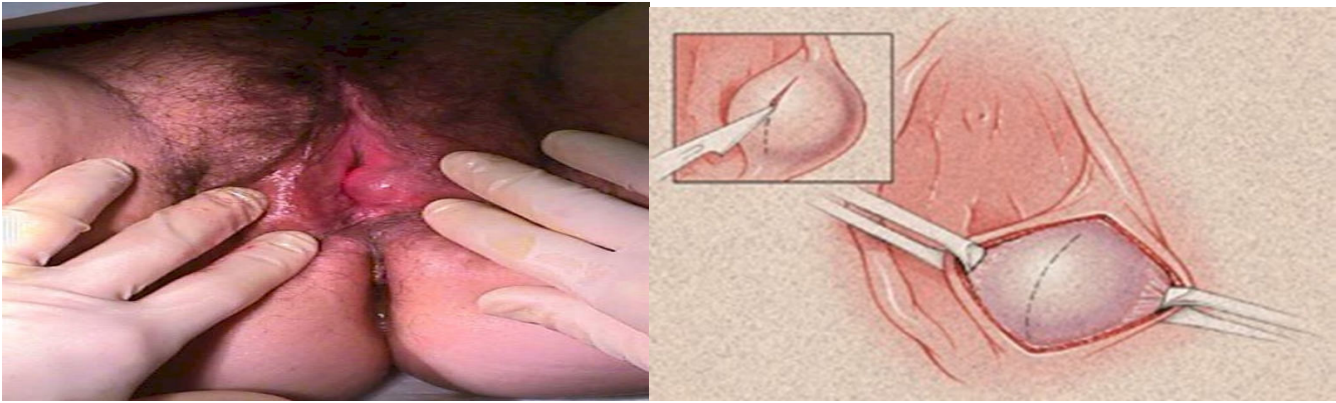
Any persistent ulcer should be biopsied to exclude malignancy.

□

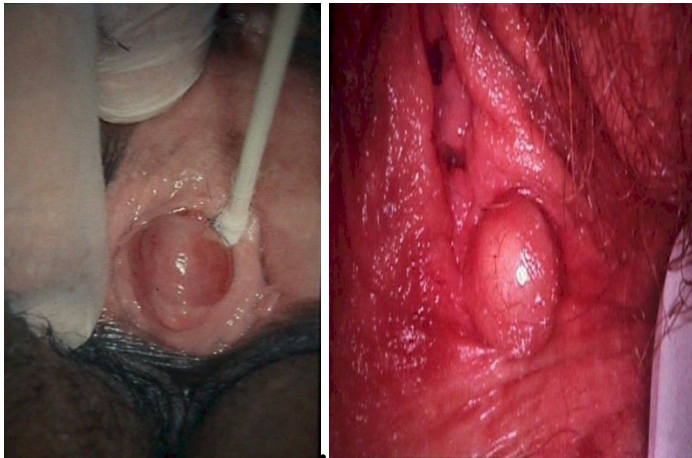
2. Bening vulval masses:

 □ *Bartholin's cyst.*

- *Most common Vulval cyst ,usually unilateral, on the postero-lateral side of the introitus , about 2 cm & contains sterile mucus , Usually asymptomatic.*
- *secondary infections lead to Bartholin's abscess which treated by → excision or Marsupialization*



- Epidermal inclusion cyst.**
- Skene's duct cyst ,skene duct are found on each side of urethra**
- Normally neither seen nor felt , when inflammation occure (skenitis May become swollen and tender, particularly with GC or chlamydia Rx: drainage**



(skenitis)

(inclusion cyst)

- Congenital mucous cysts: arise from mesonephric ducts remnants**
- Cyst of the canal of Nuck: can give rise to hydrocele in labia maqjora**
- Sebaceous cyst.**
- Papillomatosis (solid).**
- Fibroma : most common solid tumors that arise in the deeper connective tissue of the vulva, they are slow growing 1-10 cm , but may become huge, treated by excision.**
- Lipoma : solid, slow growing tumors , composed of adipose cells, treated by excision.**
- Condylomata (solid).**

-
- **3. Dermatological conditions:**
- **1.Psoriasis: appears velvety ,but lacks the characteristics scaly patches found on the knee and elbow.**
- **2.Behcet syndrome: ulcers in the vulval, oral , ocular areas, genital lesions can result over time in a scarred vulva, diagnosis based on the concurrence of ulcers in vulva, mouth, and ocular involvement, the recurrent nature of the disease, and exclusion of syphilis and crohns disease.**
- **3.Crohns disease: vulval ulcers can precede the development of the GIT ulcerations. They are slit like or knife cut ulcers with prominent edema. Driaining sinuses and fistula to the rectum may occur.**
- **4.Acanthosis negricans: most commonly occur in the axilla or the nape of the neck then the vulva, charectarised by darky pigmented velvety or warty surface, the cause usually related to insulin resistance.**

- **Vulval intraepithelial neoplasia**
- **It is a premalignant conditions which is increasing in incidence.**
- **Histological Classification of VIN:**
- **1.Squamous Intra-epithelial Neoplasia (SIN)**
- **VIN 1(lower 1/3 of vulvar epithelium)**
- **VIN 2(lower 2/3 of vulvar epithelium)**
- **VIN 3(full thickness of the vulvar epithelium)**

- **2.Non-squamous Intra-epithelial Neoplasia**
- **3.Paget's disease**
- **4.Tumors of the melanocyte**

VIN 3 can be unifocal or multifocal. Typically, multifocal VIN 3 presents with small hyperpigmented lesions on the labia majora . Some cases of VIN 3 extending to the posterior fourchette and involving the perineal tissues.

The term Bowenoid papulosis (bowenoid dysplasia) has been used to describe multifocal VIN lesions ranging from grade 1 to 3.

□ **-Most women with these lesions are in their 20s, and some are pregnant. After childbirth, the lesions may regress spontaneously.**

-Can be either associated with HPV(can occur in premenopausal women) or with lichen sclerosis(in postmenopausal women) ,mean age is 45 years.

□ **-50% asymptomatic, and if symptoms occur , the most common is itching.**

□ **-Most lesions are elevated and white(hyperkeratinization), red(thinning of the epithelium) ,pink, brown, or grey in colour.**

□ **-20% of lesions are warty in appearance .**

Diagnosis:-careful inspection of the vulval area under light and with the aid of magnifying glass. 5%acetic acid is applied the after 2 minute VIN turn white and mosaic , or punctuation may be visible. Adequate biopsy to rule out invasive disease may be needed.

Treatment:

-Spontaneous regression of VIN3 in women with the variant known as bowenoid papulosis is well described.

-Because progression is relatively uncommon, typically occurring in 5%-10% of cases , extensive surgery is not warranted.

-The therapeutic alternatives for VIN 3 are simple excision, laser ablation, and superficial vulvectomy with or without split-thickness skin grafting.

-Excision of small foci of disease produces excellent results- local excision with the margins of 5mm are adequate. An excision biopsy may be both diagnostic and therapeutic

-The carbon dioxide laser can be used for multifocal lesions but is unnecessary for unifocal disease. The disadvantages are that it can be painful and costly and does not provide a histopathologic specimen .

-Superficial vulvectomy is appropriate to treat extensive and recurrent VIN 3 . -The goal of the surgery is to extirpate all of the disease while preserving as much of the normal vulvar anatomy as possible. Split-thickness skin grafts can be harvested from the thighs or buttocks, but the latter is more easily concealed .

,if the disease multifocal or cover a wide area graft may improve the cosmetic result of a skinning vulvectomy.

Donar site is often very painful and a satisfactory result can be obtained in most patients with out grafting.

-Adenocarcinomas in situ VIII (pagetes disaes):

-Occur in white postmenopausal women , in the vulval , nipple area of the breast.

-20% associated with adinocarcinoma.

-Itching and tenderness are common, appears like well demarcated , eczematus , with white plaque like lesions.

-Growth may progresses beyond vulva to the mons pubis , buttock , and thighs.

-Diagnosis :histologicaly charctarized by large , pale, pathognomonic page'ts cells, typically located in the epidermic and in the adeneaxal structures.

-Treatment:

-Local superficial exision with the margins 5-10 mm.

-Lazer therapy in reccurrences which are common.

□



Good Luck