



# FEMALE GENITAL SYSTEM PATHOLOGY

## Lec. 1

- A.P.Dr. Maather Bager Hussein
- Department of Pathology

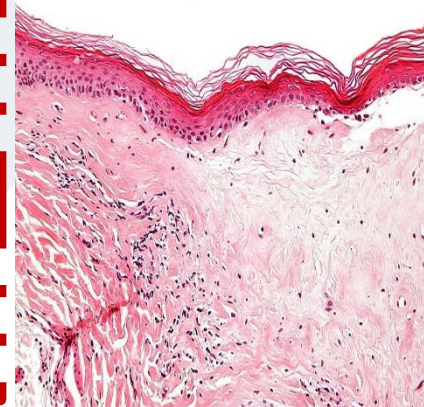
## Case presentation

A 65-year-old woman , without any history of significant medical or family medical history, **presented** with history of vulvar and perianal itching with white patches and vulvar swelling . It started as erythematous macule , expanding gradually, and finally turned out to be a white patch.

**Examination** revealed a well-demarcated, mild atrophic white patch with a violaceous periphery over vulvar and perianal area , systemic examination was normal.

**Histopathologic examination** of the lesion showed:-

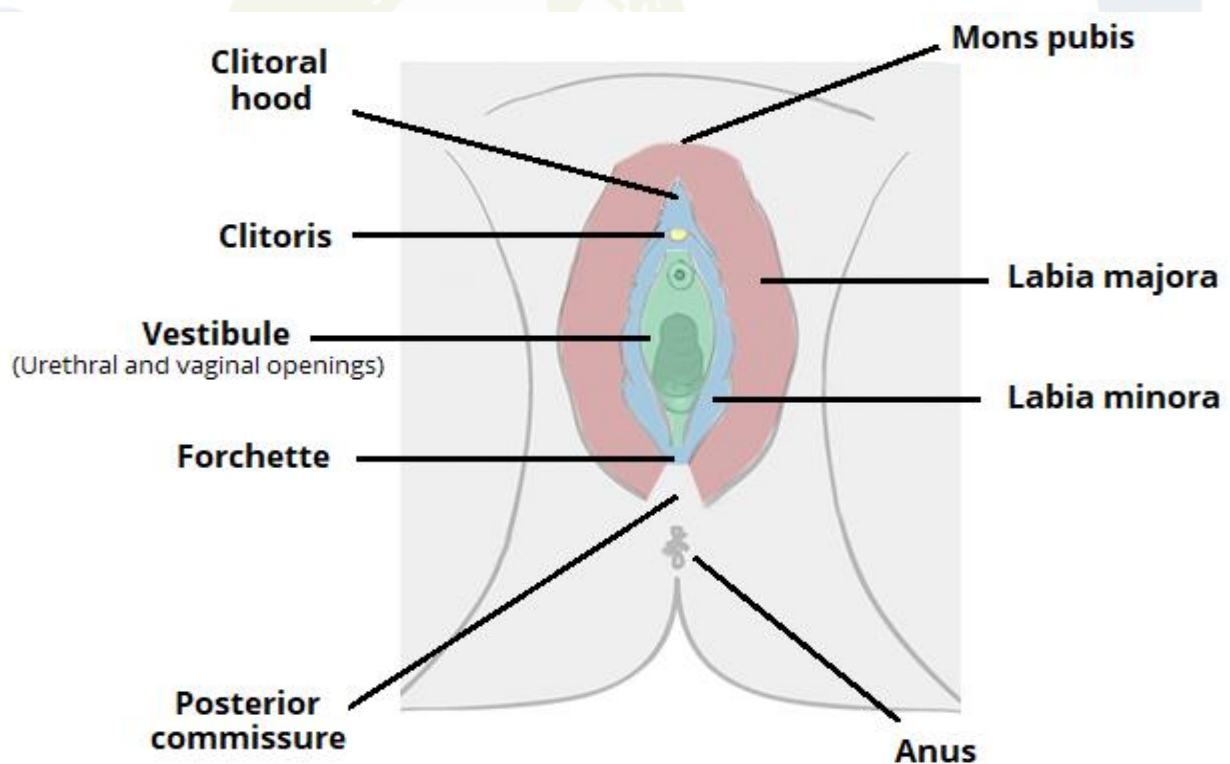
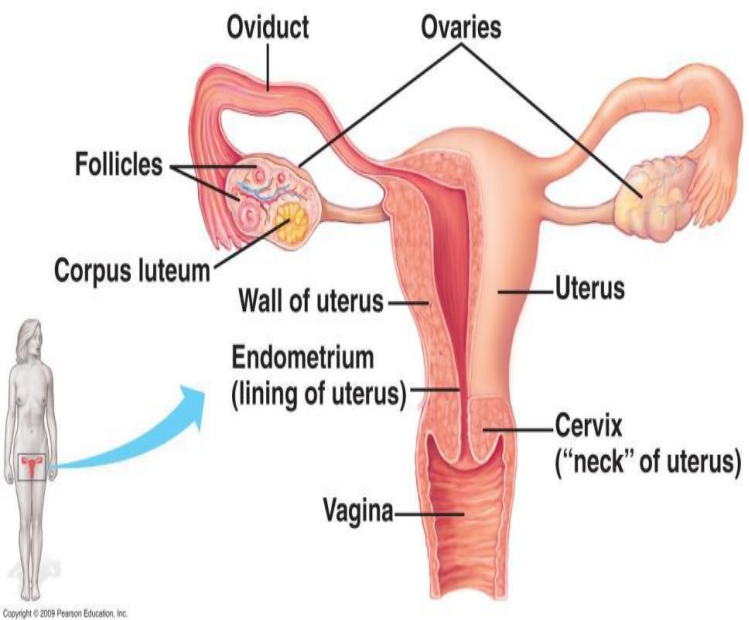
**Superficial hyperkeratosis ,Epidermal thinning, and dermal fibrosis with a mononuclear perivascular infiltrate.**



# Objectives of this lecture

At the end of the lecture

- Anatomy and normal histology of vulva (rapid revision)
- Classification of vulvar pathological disorders
- Non-neoplastic epithelial disorders of vulva
- Intraepithelial neoplasia
- Invasive disease (vulvar cancer)
- ❖ Types
- ❖ Presentation
- ❖ Histopathological finding



# Disorders of the Vulva

## Classification

### 1. Nonneoplastic epithelial disorders of vulva

- Lichen sclerosus
- Squamous cell hyperplasia (**lichen simplex chronicus**)
- Other dermatoses (e.g. psoriasis, lichen planus)

### 2. Intraepithelial neoplasia

- Squamous vulvar intraepithelial neoplasia (VIN)
- Non-squamous **Glandular** intraepithelial neoplasia
  - Extramammary Paget's disease

### 3. Invasive disease (vulval cancer)

# NON NEOPLASTIC LESIONS

## 1- LICHEN SCLEROSUS ET ATROPHICUS



Inflammatory dermatosis that mostly affects **anogenital area**. Lesions begin as papules or macules that eventually coalesce into smooth, white parchment-like areas.

**Pathogenesis is uncertain :-**

- **Autoimmunity: autoantibody against ECMPI**
- Genetic : high correlation of it has been reported between twins and family members
- Infection: spirochetes(*borrelia burgdoferi*), or viruses (HPV , Hepatites C)
- Local skin changes: trauma , oxidative stress DNA and Protein damage
- Hormonal: Since LS is primarily found in women with a low **estrogen** state (prepubertal and postmenopausal women). To date though, very little evidence has been found to support this theory

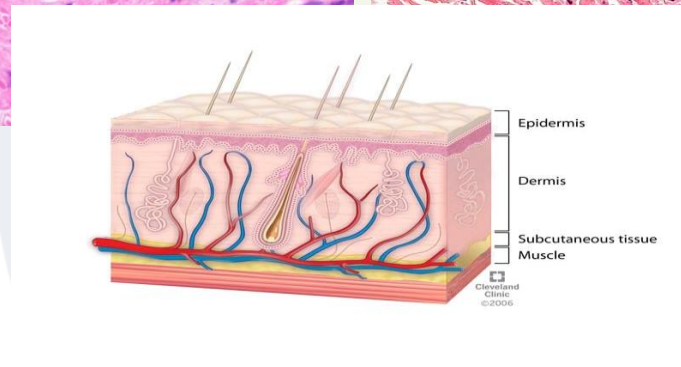
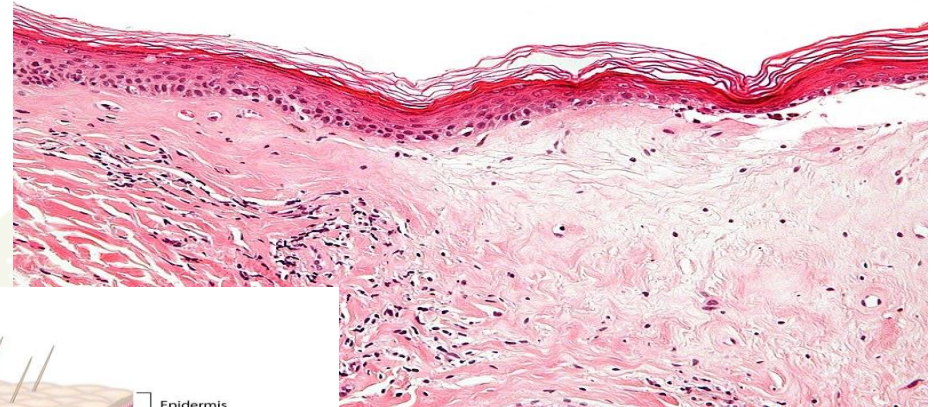
# Clinical Findings



- Age : Occur in all age group but **Most common in menopausal women**
- Site : It may be appeared elsewhere on the skin
- **Symptoms** : Commonly present with **vulval and perianal itching** , **Pain** may occur, but is usually secondary to skin trauma from scratching , **Dysuria** as urine comes into contact with the split skin . **Narrowing of introitus** from the scarring effect causing dyspareunia
- **Signs** :
  - **Skin is thin, inelastic, white, crinkled “tissue paper”**
  - **Fissures and erosions** might occur from local trauma.
  - **Inflammatory adhesions.**

# Histopathology

- Superficial hyperkeratosis ,Epidermal thinning, and dermal fibrosis with a mononuclear perivascular infiltrate.



## Complications and Cancer risk .

- **Main issues are the scarring complications of the disease.**

**The labia can** become atrophic and stiffened, with constriction of the vaginal orifice

- **Increased risk of squamous cell cancer of vulva in women with lichen sclerosis (2-4%).**



# NON NEOPLASTIC LESIONS

## 2- Lichen simplex chronicus (Squamous Cell Hyperplasia)

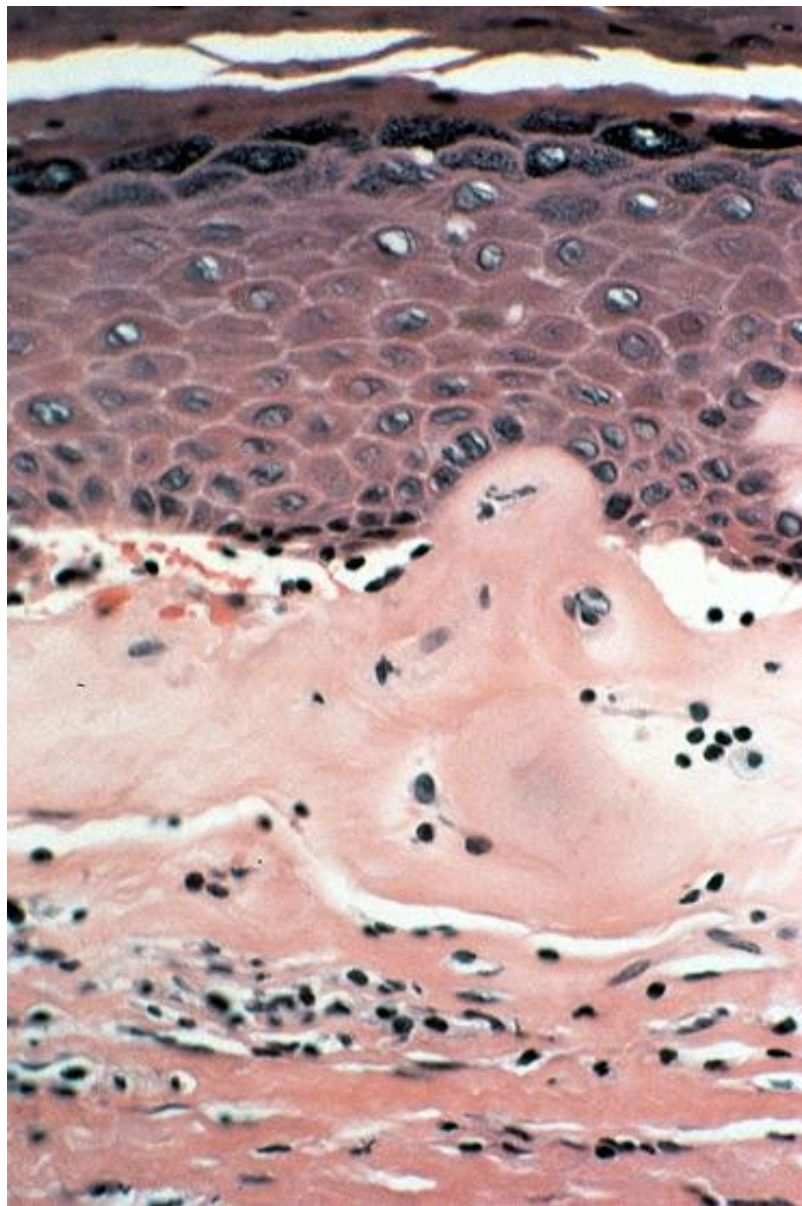
This is a non-specific response to recurrent scratching to relieve pruritus ( recurrent trauma )

Clinically :- It is characterized by white plaques

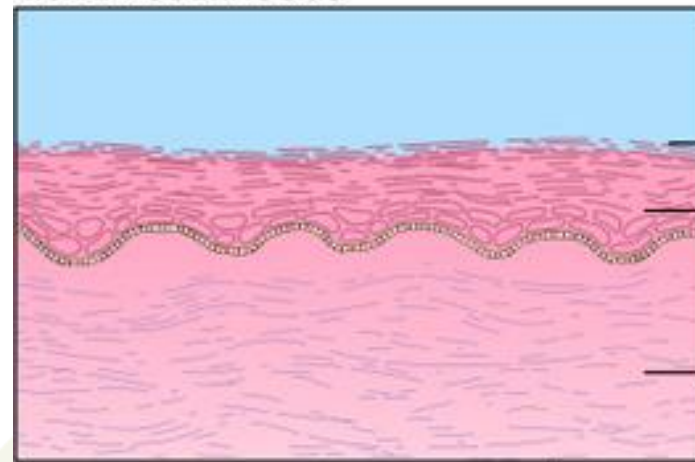
Histologically :- **marked epidermal thickening** ( d.t increased mitotic activity in basal & pickle cell layer ) with **significant surface hyperkeratosis**.

Although **lichen simplex chronicus** does not exhibit **epithelial atypia** and there is no **increased** predisposition to **malignancy**

BUT It is often present at the **margins of vulvar carcinoma**.



### LICHEN SCLEROSUS



Hyperkeratosis

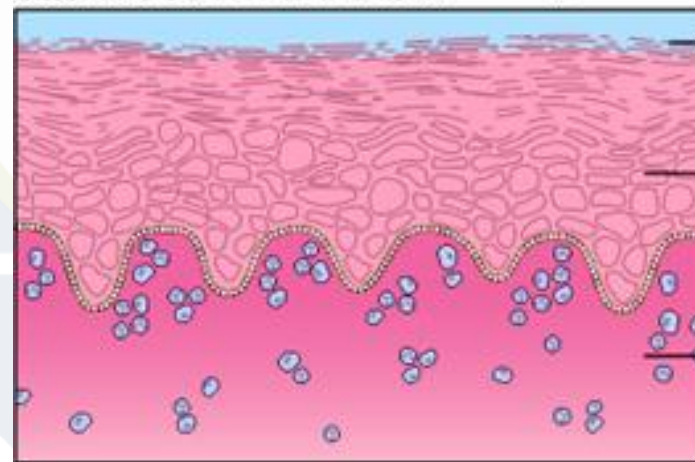
Thinned epidermis

Sclerosis of dermis with atrophy of adnexa

1-4%

CARCINOMA

### SQUAMOUS HYPERPLASIA



Hyperkeratosis

Thickened epidermis

Dermis with mild chronic inflammatory infiltrate

## NON NEOPLASTIC LESIONS

### 3- Benign Exophytic Lesions:-

#### Condyloma Acuminatum:

These are verrucous lesions on the vulva, perineum, vagina, and (rarely) cervix that are sexually transmitted by HPV types 6 or 11.

**Condyloma acuminatum is not considered pre-cancerous.**

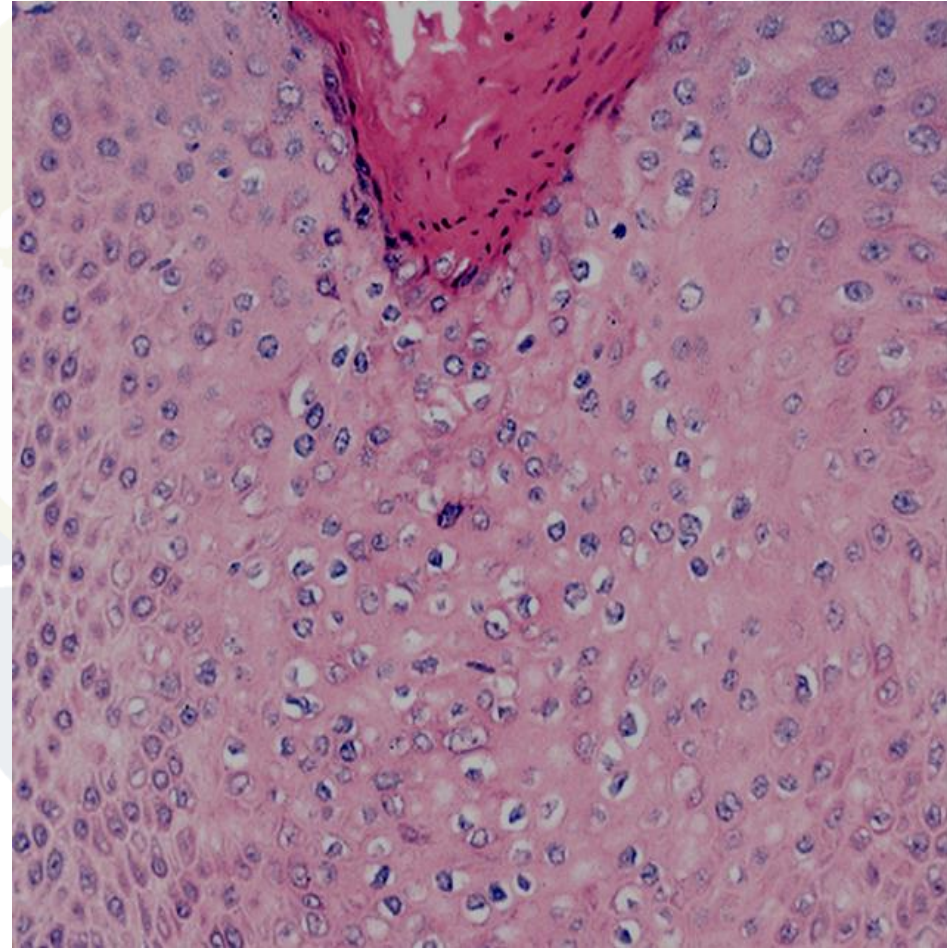
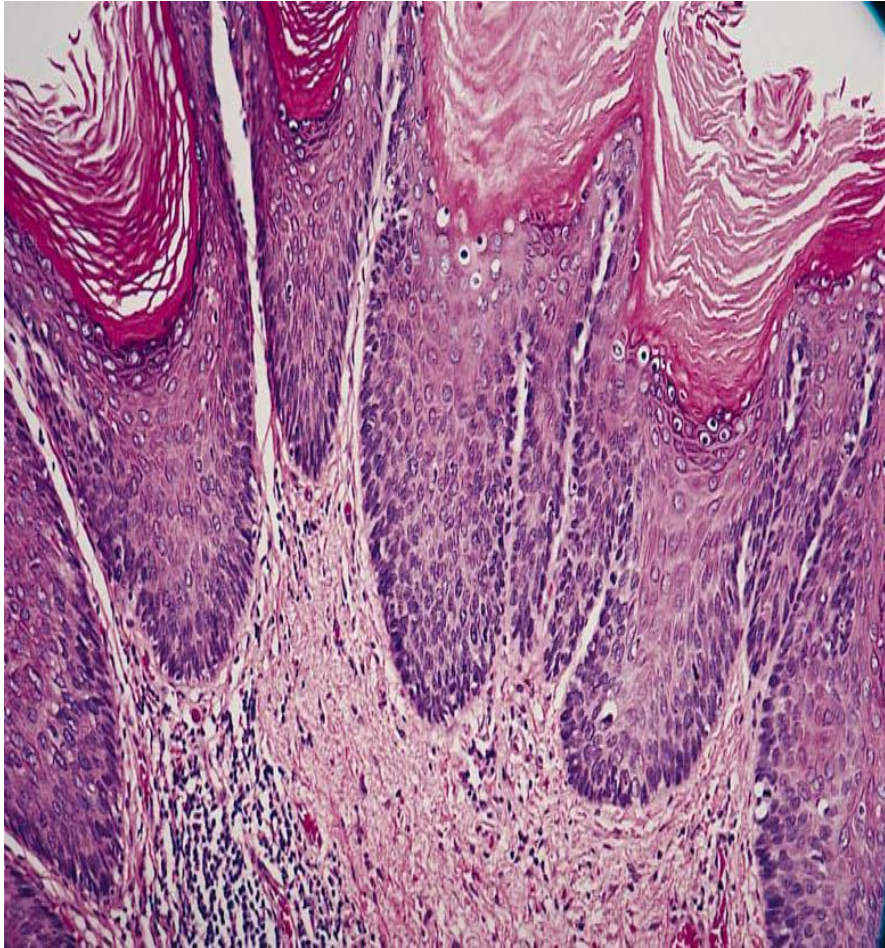
These appear as elevated warty localized red-pink to white often multiple lesions that measure up to several centimeters in diameter.



# Condyloma acuminatum

They comprise:-

- Branching epithelial proliferations of stratified squamous epithelium;
- Thickening of the epidermis ,hyperkeratosis
- Mature superficial cells exhibit characteristic perinuclear cytoplasmic clearing with nuclear pleomorphism (koilocytotic atypia) and cytoplasmic vacuolation (koilocytosis).



## Vulval Intraepithelial Neoplasia

### Squamous Intraepithelial Neoplastic Lesions

- **Dysplasia with varying degrees of atypia** that has not invaded the basement membrane but has **invasive potential**.

- **The current classification for VIN :**

- Classic (VIN) (previously designated carcinoma in situ or Bowen disease)

- Multifocal
- Graded to mild , moderate & severe acc. To thickness involved
- Premenopausal women
- Most are positive for HPV 16 and are often associated with vaginal and/or cervical HPV-related lesions, smoking and immunodeficiency
- May have similar pathophysiology to & associated with cervical intraepithelial neoplasia CIN.
- Associated with developing into the warty and basaloid type carcinoma.

- Differentiated VIN

- Unifocal
- Not graded
- Postmenopausal women
- Associated with lichen sclerosis and usually have a non viral etiology
- Not classically associated with cervical intraepithelial neoplasia CIN.
- It is associated with atypia and then carcinoma of the squamous epithelium.

## Clinical Manifestations

- Approximately 50% of cases asymptomatic.
- Classic VIN lesions manifest as discrete, hyperkeratotic, flesh-colored or pigmented, slightly raised plaques.



Raised leucoplakic warty lesion on labia minora

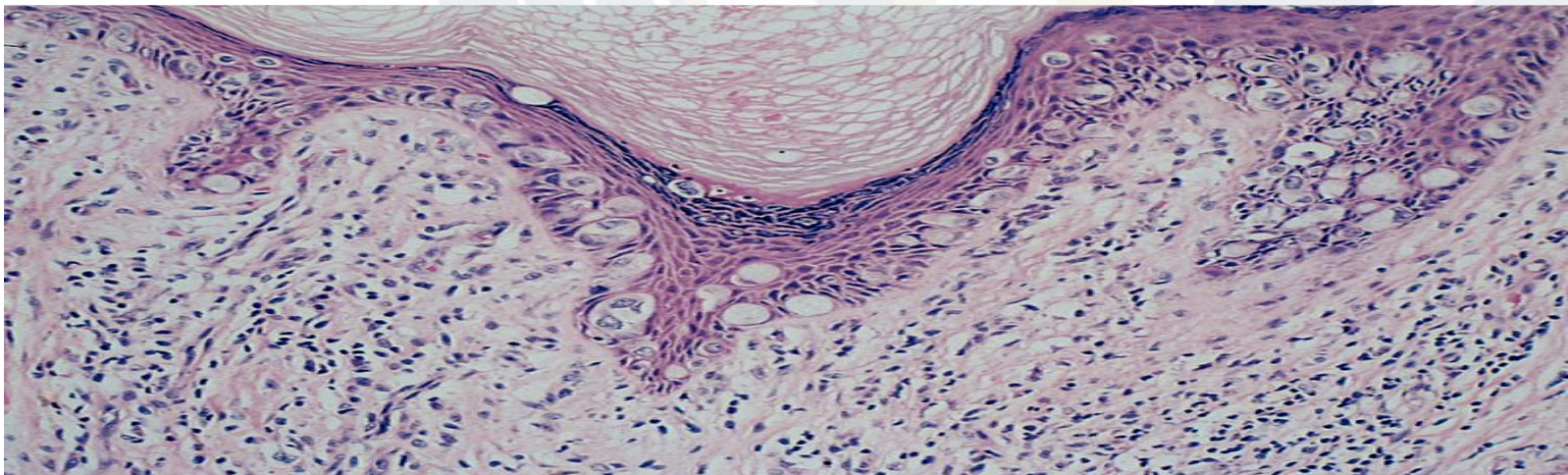
- Pruritus
- Dyspareunia
- The cervix and perianal area to be examined to exclude CIN and anal intraepithelial neoplasia.

# Glandular Intraepithelial Neoplastic Lesions

## Extramammary Paget Disease:-

- This malignant lesion appears as a red, crusted, sharply demarcated, map-like area, seen in postmenopausal women, Symptom is mainly pruritus, **Associated with an underlying adenocarcinoma**(gastrointestinal, urinary tracts and the breasts) should be checked.

Paget's disease of vulva in 87-year-old woman. Disease involves labia majora and labia minora. Note **red, crusted, sharply demarcated, map-like area**



There are scattered large, clear tumor cells within the squamous epithelium

THANK YOU  
FOR YOUR  
ATTENTION