

**Basic Histopathological Diagnosis (MLS-HIST-421)**

***Introduction to Respiratory system***

***Histopathology and cytology department***

***Pathology department***

Lec 21

Female genital tract

Dr: Maisa

# Objectives

- To identify different types of diseases affecting female genital tract
- To know the causes of some of these diseases
- To describe the morphological features of some of these diseases

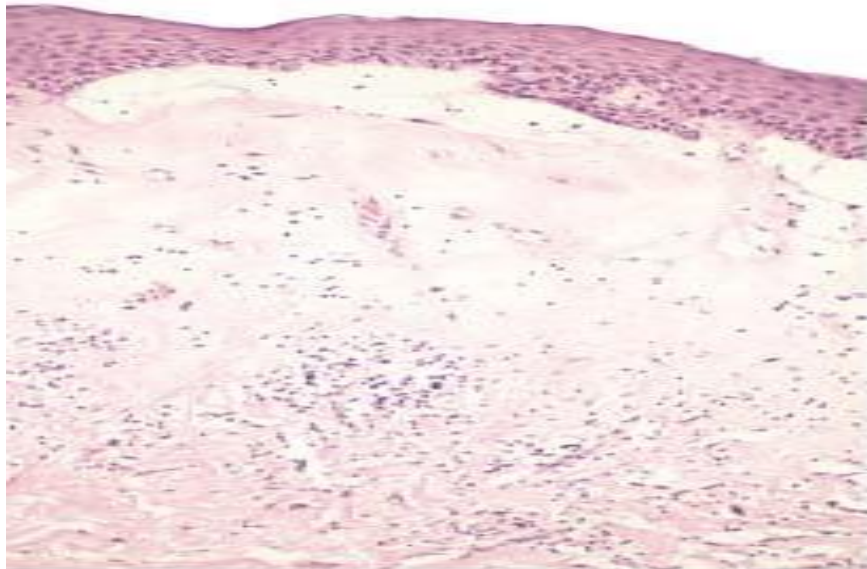
Vulva

# Vulvitis

- Infectious
  - HPV...codylomata accuminata ...intraepithelial neoplasia
  - Herpes
  - Gonococcal
  - Syphilis
  - Candida
- Irritant.....contact dermatitis

# Non neoplastic epithelial disorder

- Lichen sclerosus (thinning of epidermis)
  - Atrophic epithelium
  - Dermal fibrosis
- Lichen simplex
  - Thickened epithelium
  - Inflammatory infiltrates

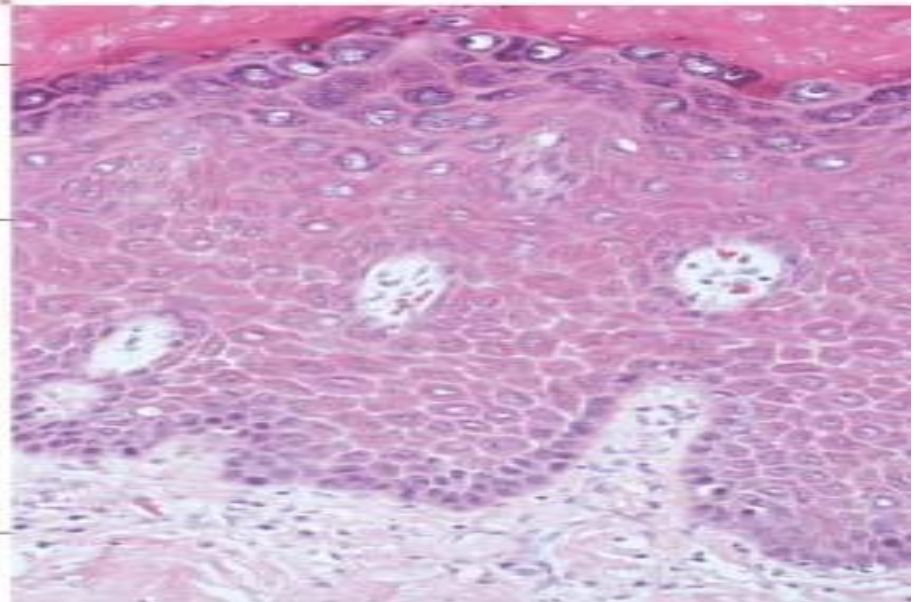


Thinned Epidermis is  
Hydropic degeneration  
at basal layer  
Sclerotic stroma  
Dermal  
inflammation

Hyperkeratosis

Thickened  
epidermis (acanthosis)

Dermal inflammation



# Tumors

- Condyloma ( warts)
- Condylomata lata.....secondary syphilis
- Condylomata acuminata.....HPV
  
- Are not precancerous but coexist with vulvar intraepithelial neoplasia (VIN)



**Acanthosis, hyperkeratosis and  
vacuolated cytoplasm**



# Vulvar intraepithelial neoplasia

- Leukoplakia caused by epithelial thickening
- HPV positive (most common
  - Multifocal
  - Poorly differentiated squamous cell carcinoma
- HPV negative
  - Unifocal
  - Well differentiated squamous cell carcinoma

Vagina

- Vaginitis
- Vaginal intraepithelial neoplasia
- Squamous cell carcinoma

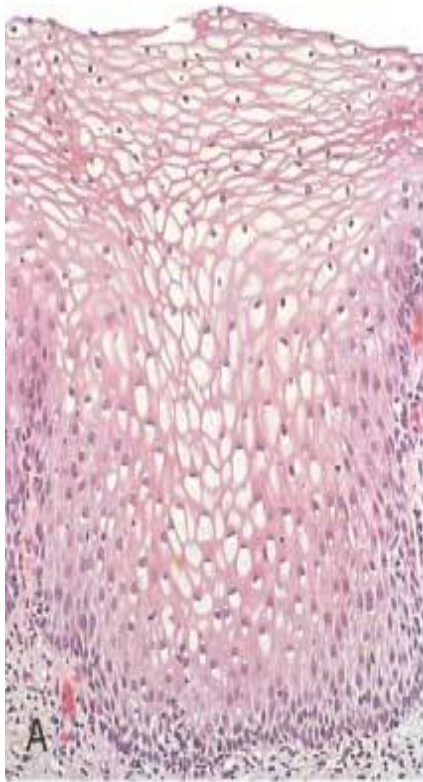
Cervix

# Cervicitis

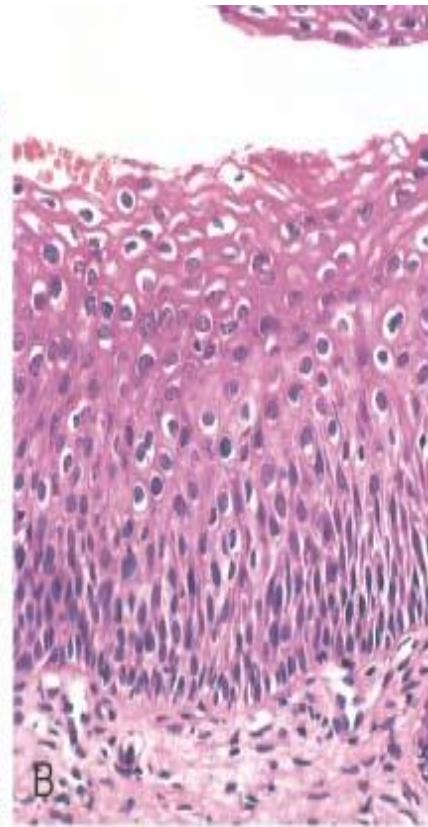
- Acute chronic
- Specific .....gonococcal (acute)  
.....herpes and C.trachomatis
- Non specific.....staph and strept
- Consist of inflammation and epithelial regeneration (squamous or columnar )
- Columnar epithelial may undergone squamous metaplasia or stratified squamous

# Tumors

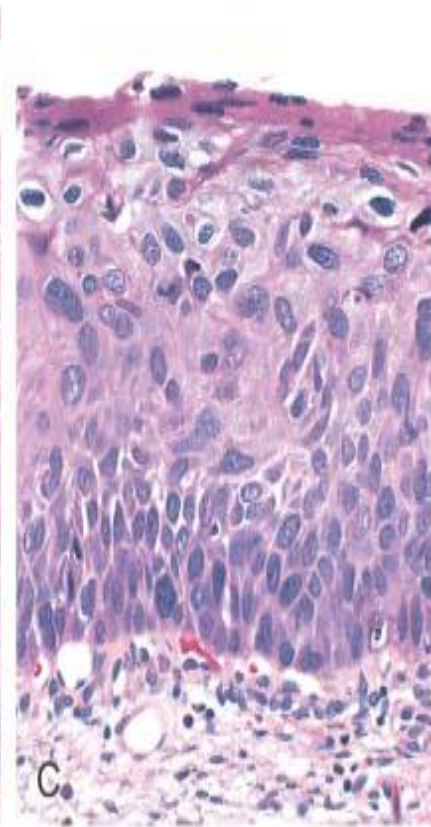
- Cervical intraepithelial neoplasia (CIN)
  - All cervical squamous carcinoma arise from CIN but not all CIN progress to cancer
  - Grade I, II and III (carcinoma in situ)



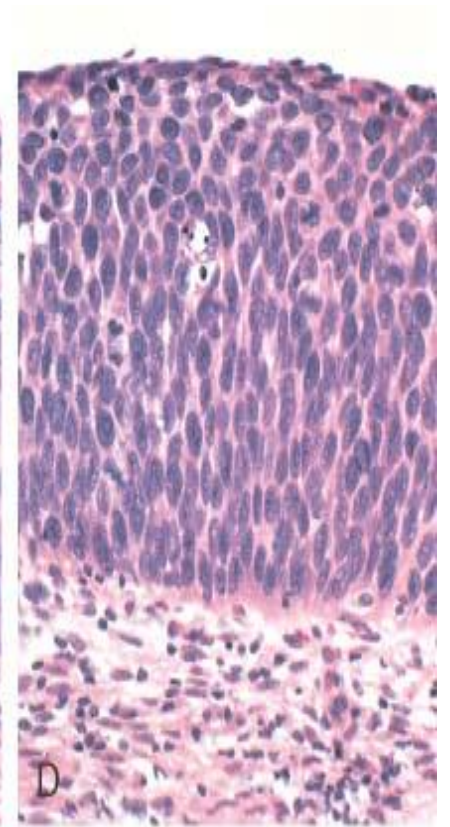
Normal



CIN I



CIN II

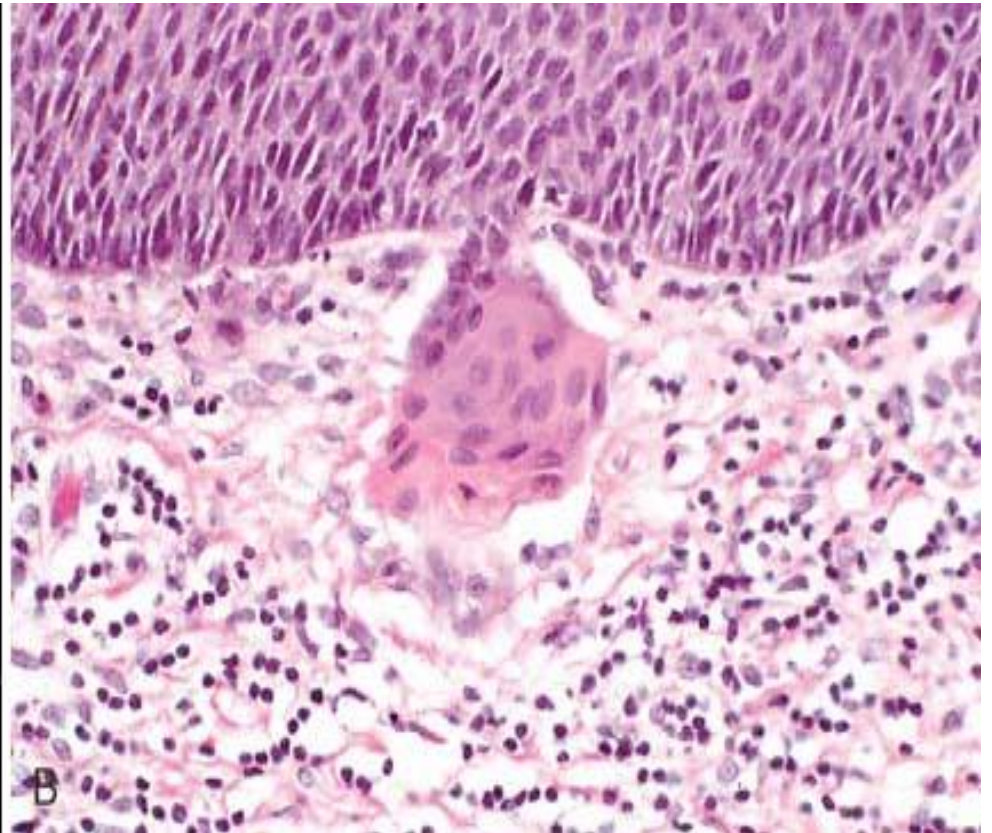


CIN III

# Invasive carcinoma of cervix

- Arise at transformation zone  
(squamocolumnar junction....ecto-endocervix)
- Risk factors ( sexual activity, smoking, HPV)
- Most of them are HPV related
- Pap smear is a screening tool





Uterus

# Endometritis

- Inflammation of endometrium
- Can be caused by:
  - Retained product of conception
  - Foreign body
  - Gonorrhoeae
  - C.trachomatis
- Present with fever, pain, menstrual irregularities, infertility and ectopic pregnancy

# Adenomyosis

- Growth of the endometrium down into myometrium
- Endometrial stroma or gland or both
- Present with menorrhagia, dysmenorrhea and pelvic pain before onset of menstruation

# Endometriosis

- Location of endometrial glands or stroma outside endometrium (pelvis, abdomen, LN, lung)
- Cause cyclical bleeding, dysmenorrhagia and pelvic pain

# Endometrial hyperplasia

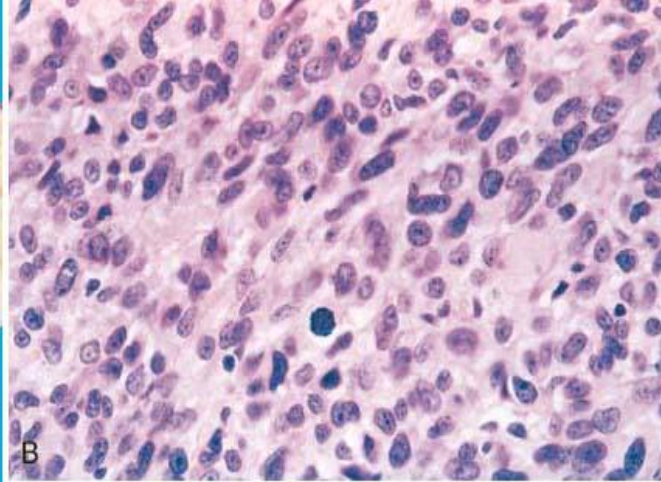
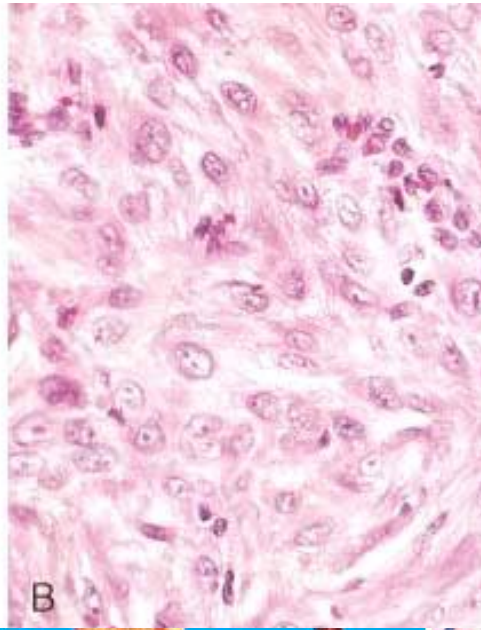
- Excess estrogen ( endogenous or exogenous)
- Risk factors:
  - anovulatory cycles
  - PCOS
  - Estrogen producing ovarian tumor
  - Obesity and hormone intake
- Has a risk for developing carcinoma

# Tumor of endometrium and myometrium

# Leiomyomas

- Benign uterine smooth muscle tumor
- Frequently multiple
- Present with menorrhagia, pelvic mass or as a cause of infertility
- Leiomyosarcoma is the malignant counterpart
- Necrosis, cytologic atypia and mitotic activity are the malignant features





# Endometrial carcinoma

- Endometrioid carcinoma
  - Associated with excess estrogen and endometrial hyperplasia
  - Associated with PTEN gene
  
- Serous carcinoma
  - Endometrial atrophy
  - P53 gene
  - Older women

Fallopian tubes

- Salpingitis
- Fallopian tube carcinoma

Ovaries

- Cysts ( PCOS)
- Tumors
  - Surface epithelial cells
  - Germ cells
  - Sex cord stroma
  - Metastasis

# Epithelial tumors

- Most common ovarian tumors
- In women older than 40 years
- Serous, mucinous and endometrioid

# Germ cell tumors

- In young women
- Dysgerminoma, endodermal sinus tumor, choriocarcinoma ( placental tissue) and teratoma ( contain tissues from 3 germ layers...endoderm, mesoderm and ectoderm)
- Mostly cystic teratoma ( benign)



# Sex cord stromal tumors

- Granulosa- theca
- Sertoli- leydig
- Fibroma (stromal)