



GENITOURINARY SYSTEM

SUBJECT : Anatomy

LEC NO. : 11

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وَقُلْ رَبِّ زِدْنِي عِلْمًا

* للملاحظة بس هاي المحاضرة ك فايل تعتبر الجزء الثاني من فايل محاضرة

١٠ الدكتور خلص معظمها بالاون لاین المرة الماضية و ضلوا بس هذول ال ٦
سلايدات شرحهم ب ١٤ دقيقة بتسجيل مبارح اما على الوجاهي كان قاسم
المحاضرة بالنص المهم تكونوا عارفين المحاضرتين هم فايل واحد

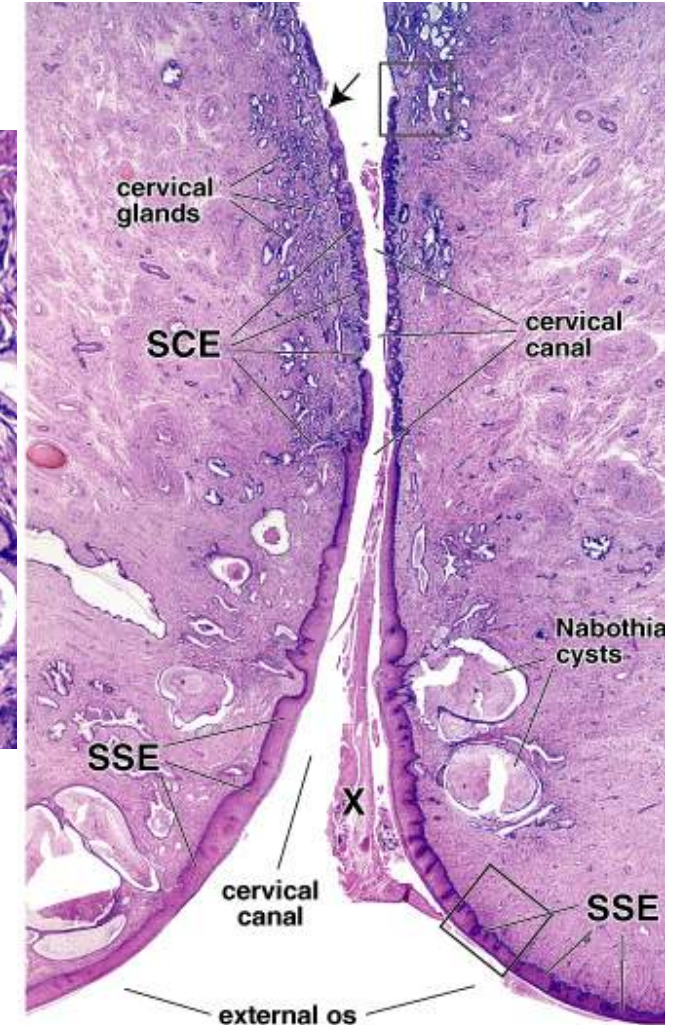
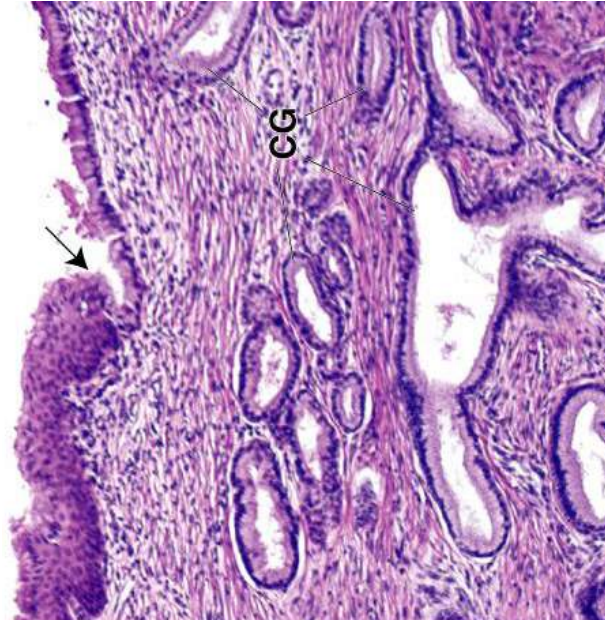
Uterine Cervix → Lower part of the uterus

It differs from the rest of the uterus.

- **Lining epithelium**
- **Glands** → They secrete mucus not proteins
- **Connective tissue** → Full of collagen
- **Muscle fibers**

*The lining epithelium of the uterine cavity of the uterus
» simple columnar, when we reach cervical canal the
lining epithelium » stratified squamous epithelium

*The 4 layers of smooth muscle fibers aren't found in the cervix although
there is some smooth muscle fibers but there's a noticeable increase
amount of collagen in the cervix which is not found in the uterine cavity



Vagina → Reproductive canal of female

Consists of three layers

- **Mucosa** → Stratified squamous non keratinized epithelium
- **Muscularis** - Due to the presence of glycogen in the lining of epithelial cells
- **Adventitia**

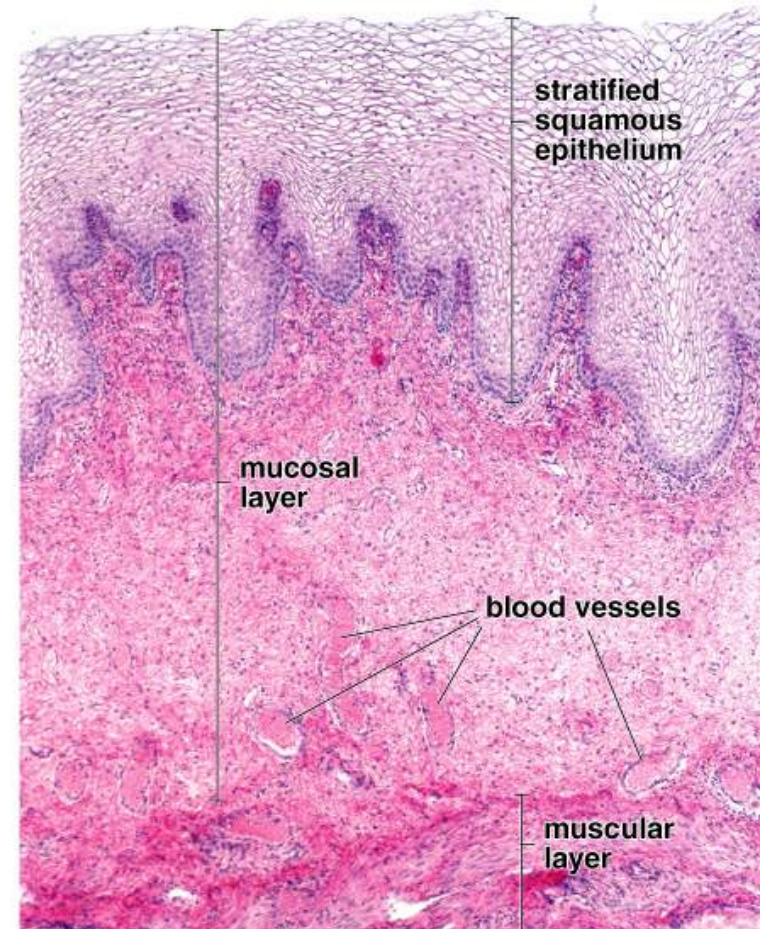
* Why glycogen? Because when they are disquamated the glycogen will get out and will be transformed into acetic acid » giving the acidic medium which is needed to protect against pathogens or bacteria

* Muscularis » smooth muscle fibers subdivided into 2 layers, the inner layer the circular, the outer layer longitudinal

* Lamina propria » full with blood vessels & a not of elastic fibers

* Adventitia » loose connective tissue but there's no covering of the peritoneum

* No glands in the lamina propria or in the epithelium of the vagina, but the source of secretion in the vagina is from vestibular glands in the external genitalia or from cervical glands



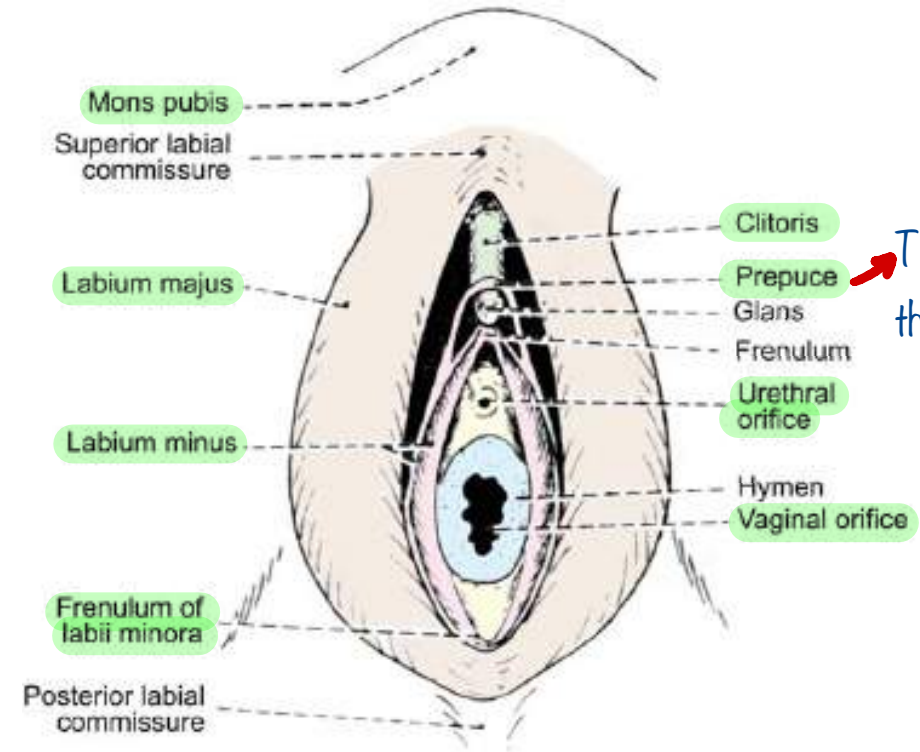
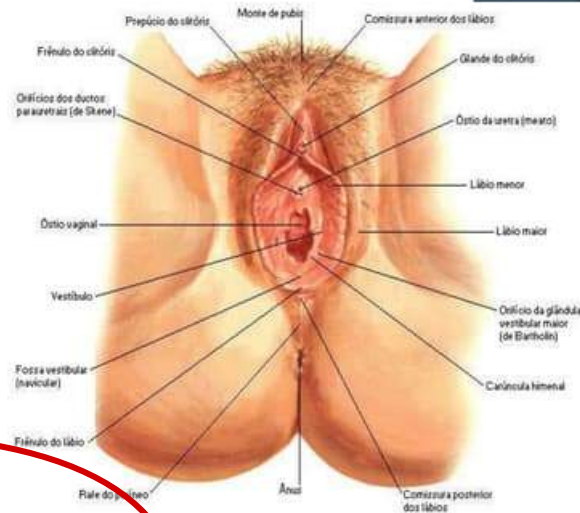
External Genitalia

EXTERNAL GENITALIA (Synonyms: Vulva, Pudendum)

The vulva or pudendum includes all the visible external genital organs in the perineum.

Vulva consists of the following:

- mons pubis
- labia majora
- labia minora
- Hymen
- Clitoris
- Vestibule
- vestibular bulbs
- urethra
- Skene's glands
- Bartholin's glands



The beginning of the clitoris

- Their openings is next to vaginal orifice, mucus secreting glands

- Mucus sereting glands next to urethral opening

- Vestibule » space within labia minora

Breast

- In girls and boys: **Lactiferous sinuses**

Before puberty

Very small branching ducts

- At puberty: → Ducts enlarge and increase in number

Ducts elongate

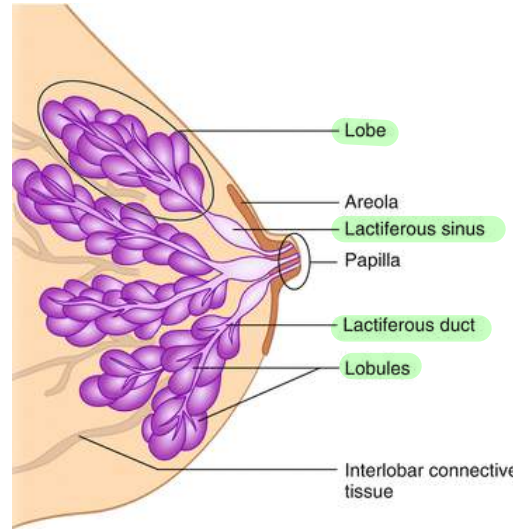
Adipose tissue deposition (estrogen)

- Adult (non-pregnant) → *At the end of ducts we will find small dilatation representing acini that will secrete milk later on

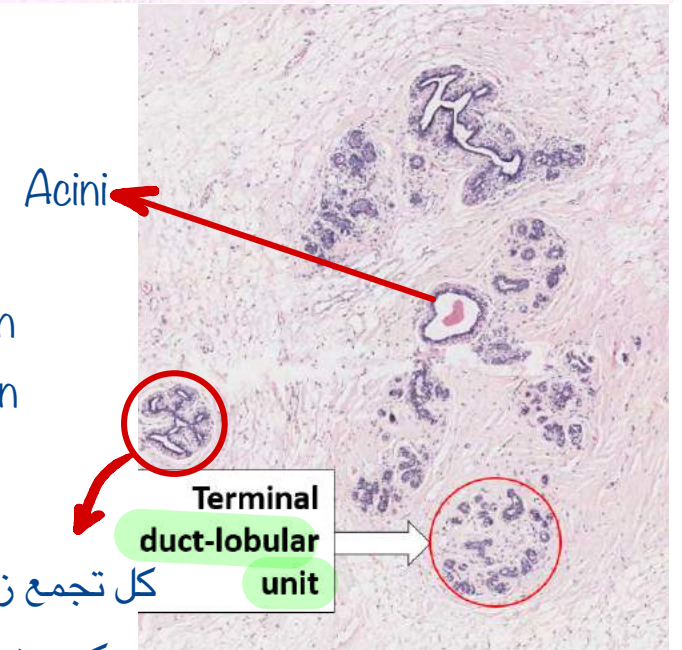
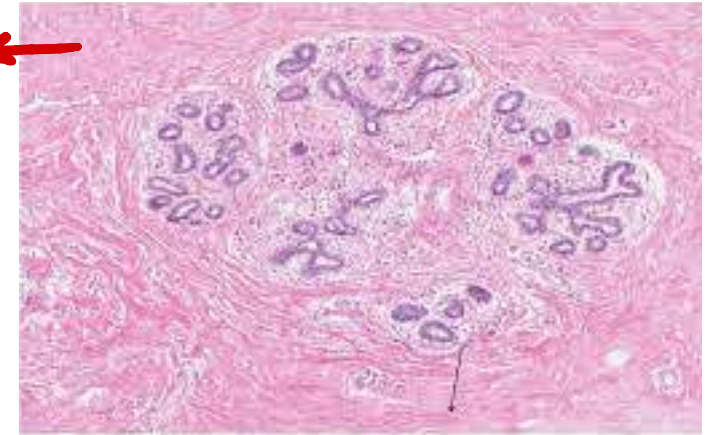
Many lobules

Each lobule consists of **small, branching ducts**

with rudimentary small secretory units



*Breast before puberty



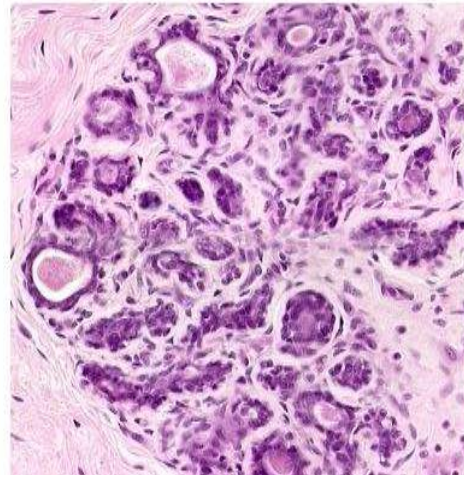
كل تجمع زي هيك

بحكي عنه lobule

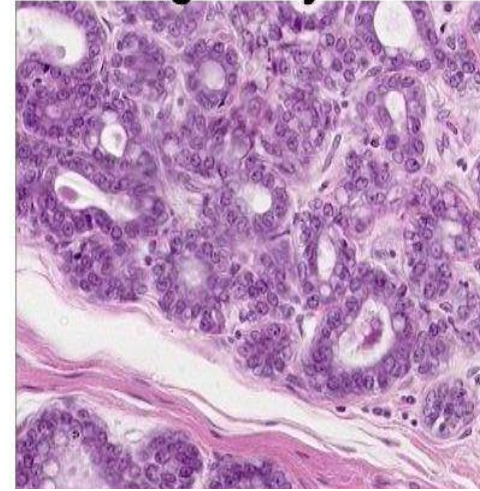
↪ Each one has its own duct

• Z

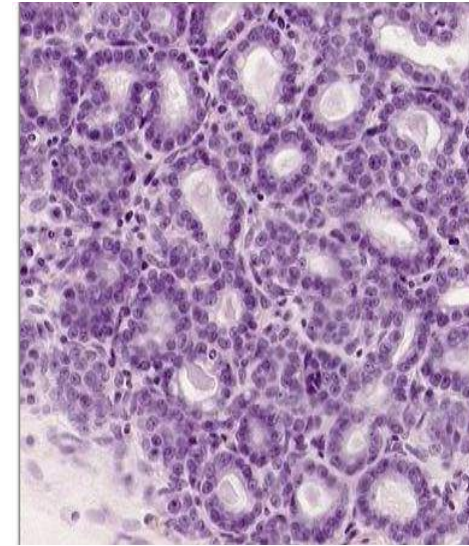
Inactive



Pregnancy



Lactation

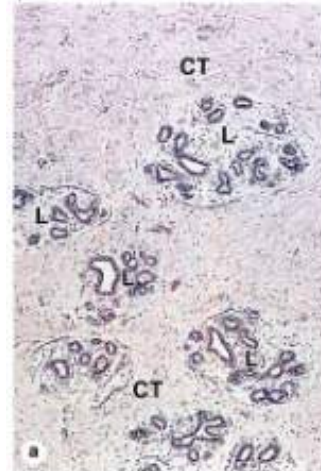


- Small sinuses

- All the lumen here are dilated sinuses that will secrete milk

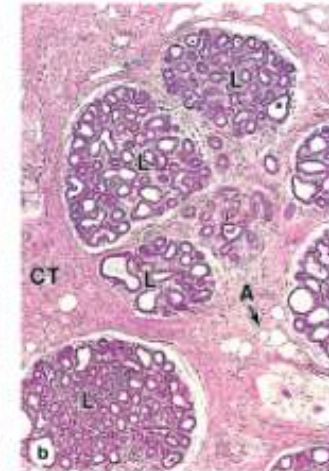
* Mammary gland consists of lactiferous ducts that open in lactiferous sinuses, 10-15 lobes each lobe constitutes of smaller subunits the lobules

Inactive



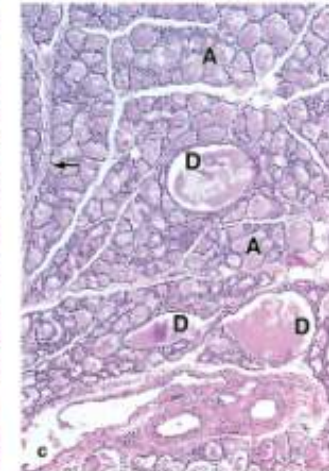
Small ducts, few lobules (L), mostly dense irregular connective tissue (CT)

Pregnancy



Growth of duct system, larger lobules that are extensively branched

Lactation



Enlarged lobules, lumens of alveoli (A) and ducts (D) filled with milk

- Large sinuses but filled with with

ANATOMY

What is the lining of endocervix?

- A. columnar epithelium
- B. Pseudostratified squamous epithelium
- C. Pseudostratified cuboidal epithelium
- D. non-keratinized stratified squamous epithelium

Bulbourethral gland open into?

- A. Membranous part of urethra
- B. Pre prostate of urethra
- C. Prostatic part of urethra
- D. Penile urethra

What causes the cervix to be hard during pregnancy?

- A. thick mucus secretion
- B. addition of collagen
- C. increase the stratification of squamous layer of cervix
- D. it has less smooth muscle than uterus

هدول اسئلة للدكتور ايام ما كان بالتكنو
بعثلي اياهم زميلنا سامي للفائدة