



# GENITOURINARY SYSTEM

SUBJECT : Anatomy

LEC NO. : Lab 4

DONE BY : Batool ALzubaidi

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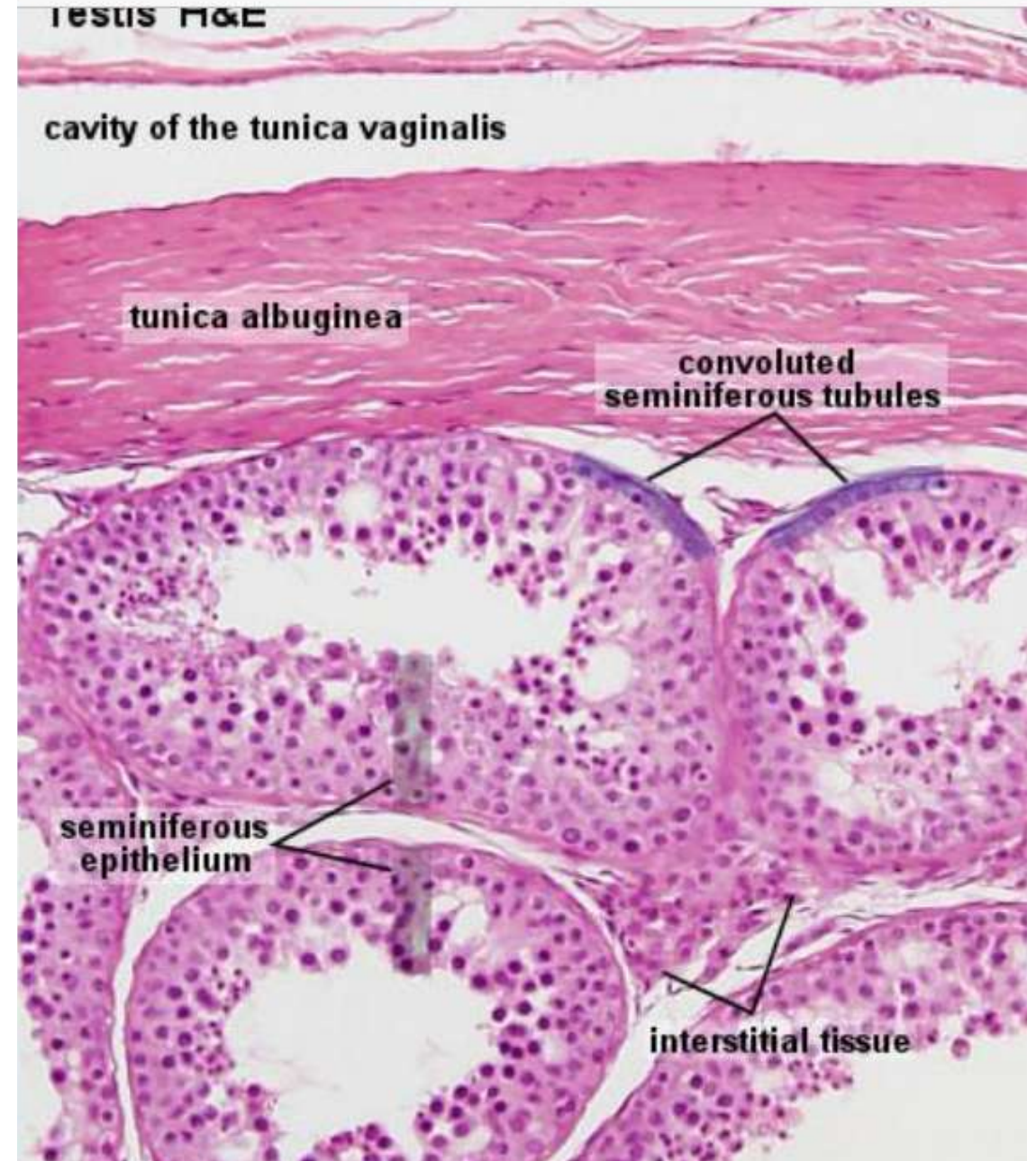
# **The practical of Genital system**

# Testis

Identify the following

- Tunica vaginalis
- Tunica albuginea
- Seminiferous tubule
- Interstitial tissue

↳ Interstitial cell of leydig

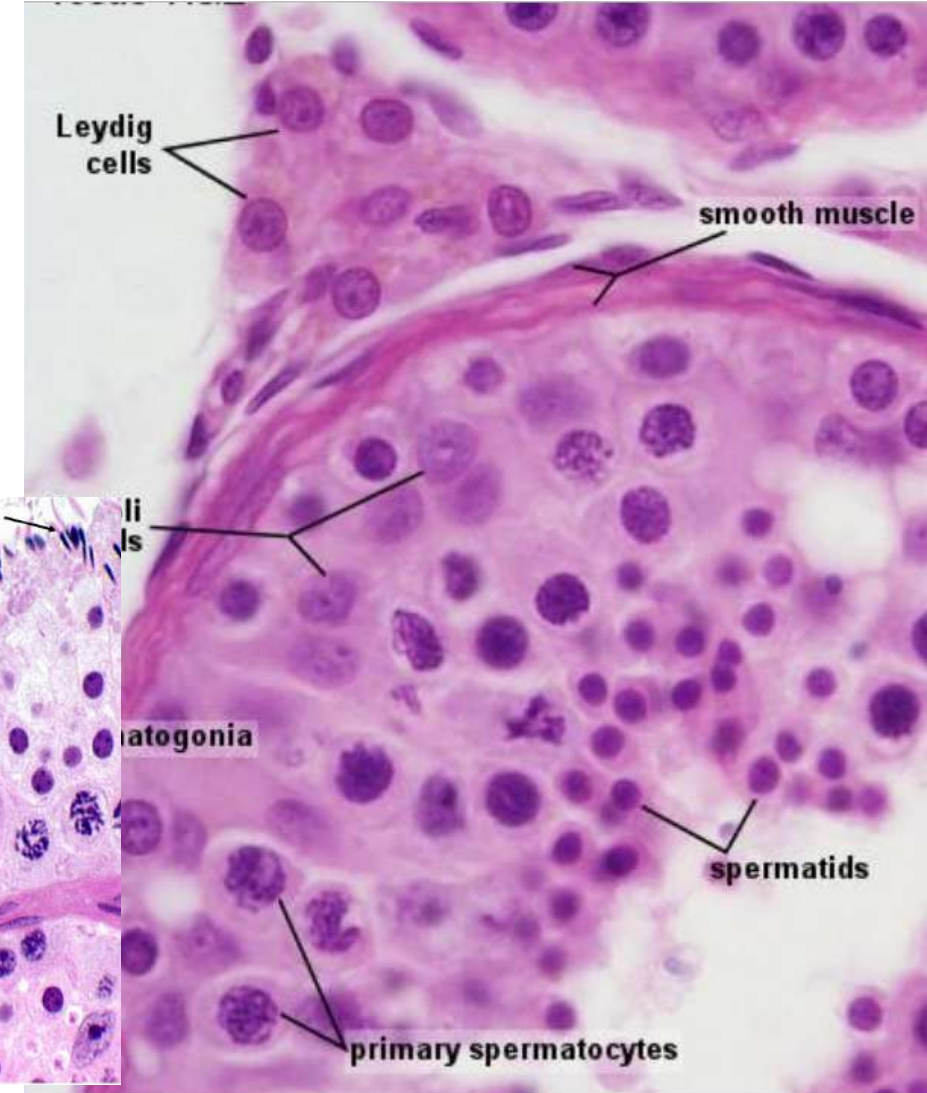
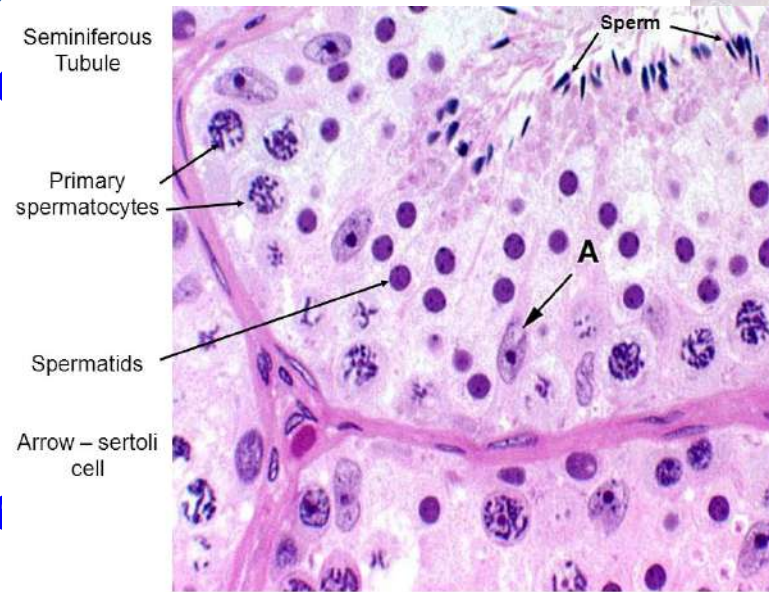




# Testis

Identify the following

- **Myoid cells** → Flat cells
- **Spermatogonia** → Usually at the base
- **Primary spermatocytes**
- **Spermatid**
- **Spermatozoa**
- **Sertoli cells**
- **Interstitial cells of Leydig**

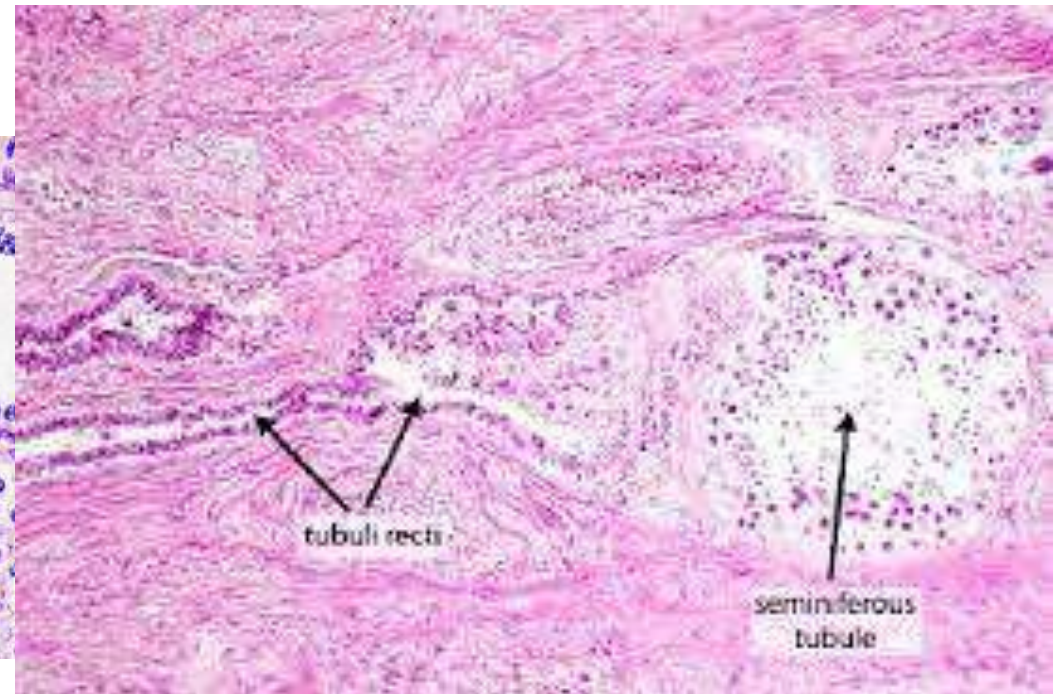
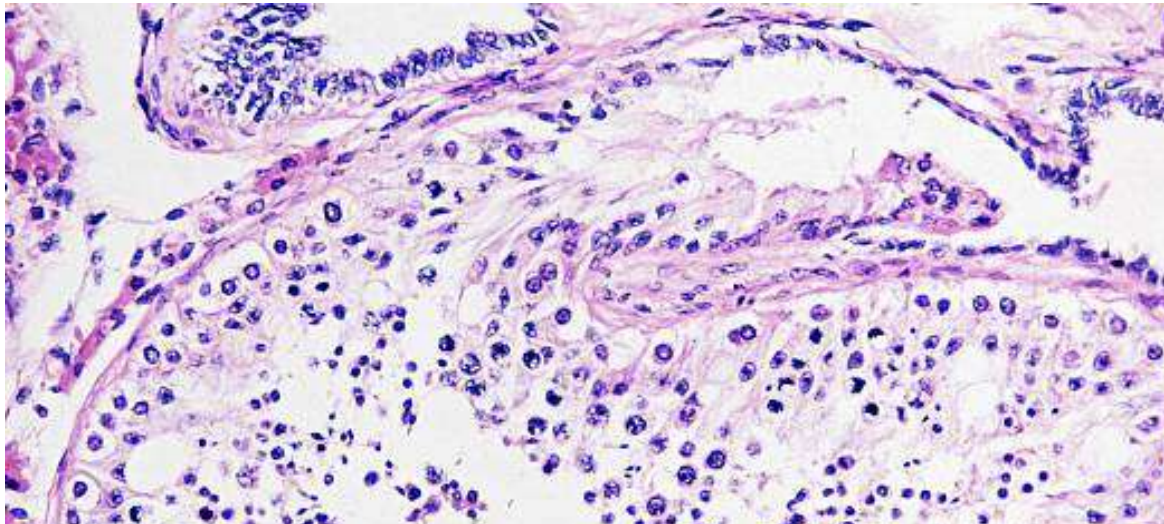


# Tubuli Recti → rete testis بنشوفهم جنب ال

- Sertoli cells → cuboidal epithelium

- Notice the **seminiferous tubule ends with tubuli recti**
- Appreciate the **type of epithelium lining straight tubules**

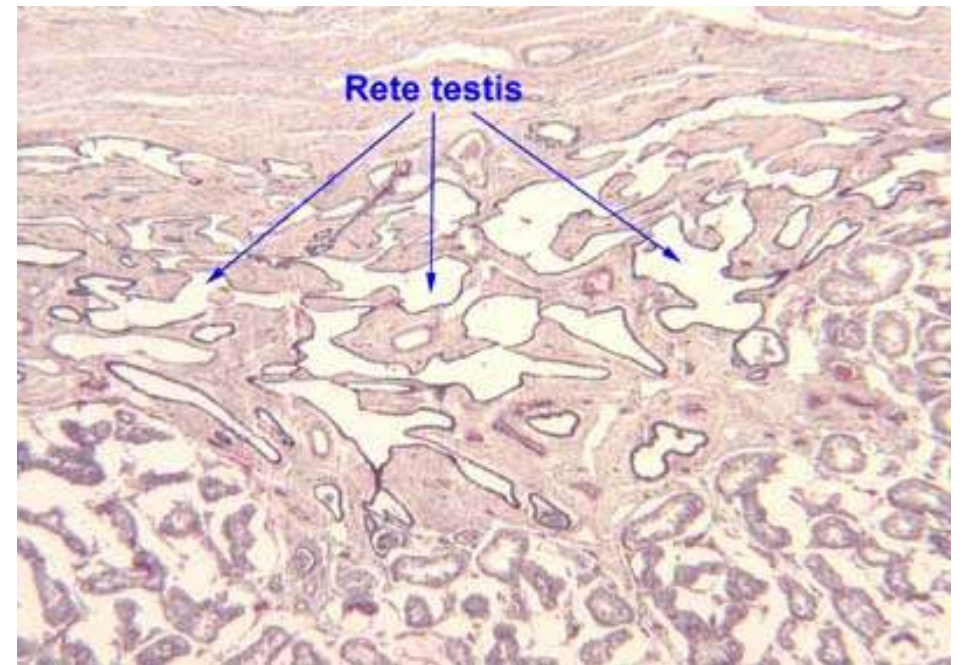
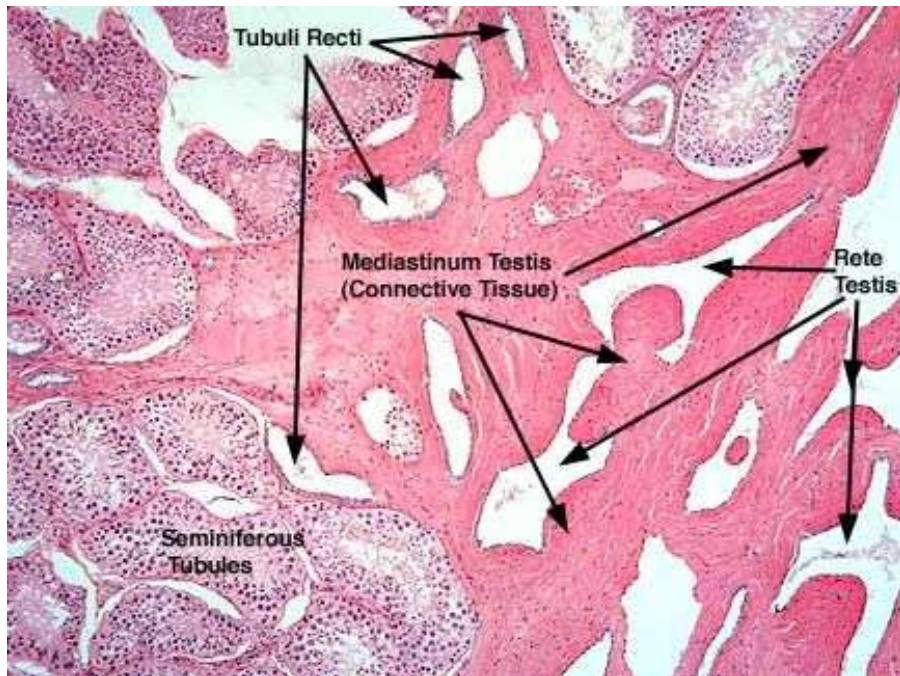
↳ Simple cuboidal epithelium





# Rete Testis

- Notice the interconnected channels with irregular lumens
- They are found in dense connective tissue (**Mediastinum Testis**)





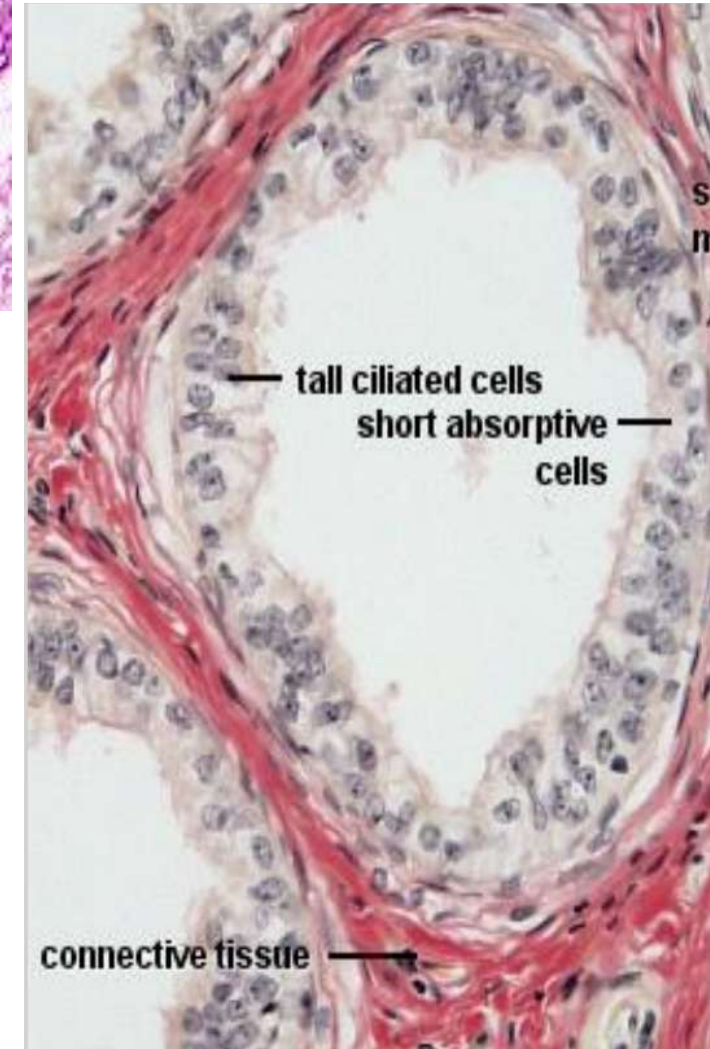
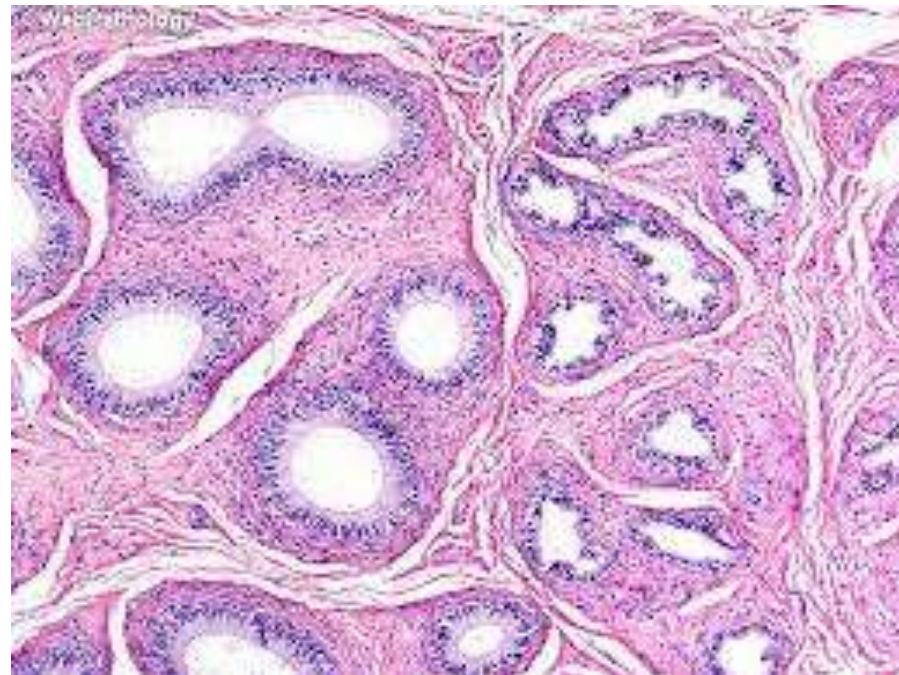
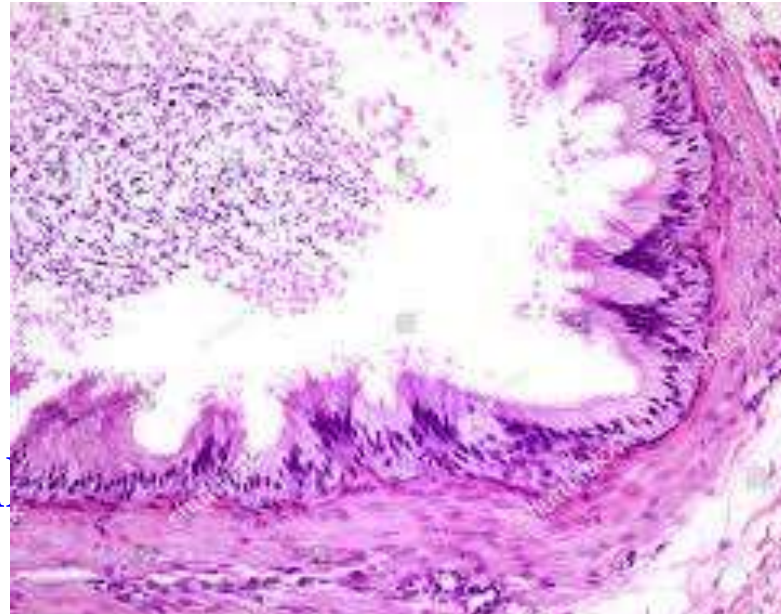
# Efferent Tubules

Appreciate

- Type of epithelium and cell
- Irregular epithelium

Ciliated and non ciliated  
cuboidal epithelium

↳ They absorb water and with  
it they move the sperms into  
the ejaculatory duct





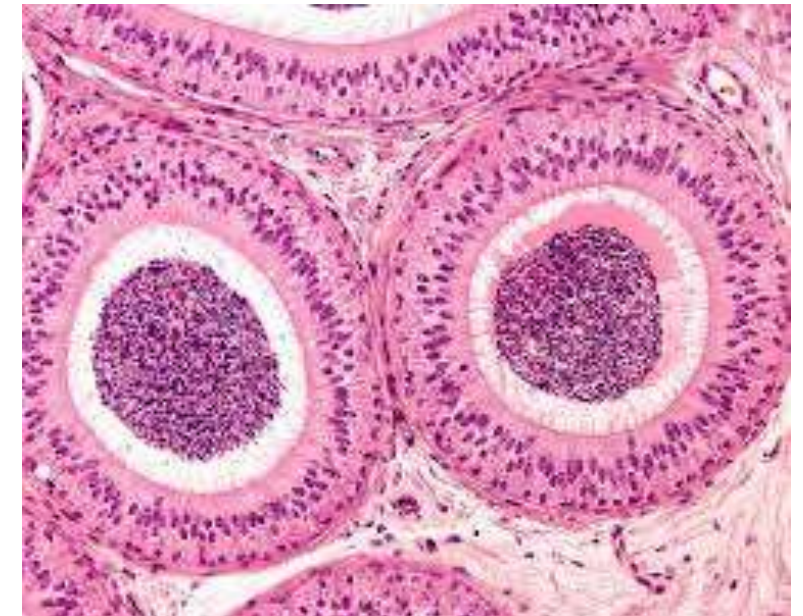
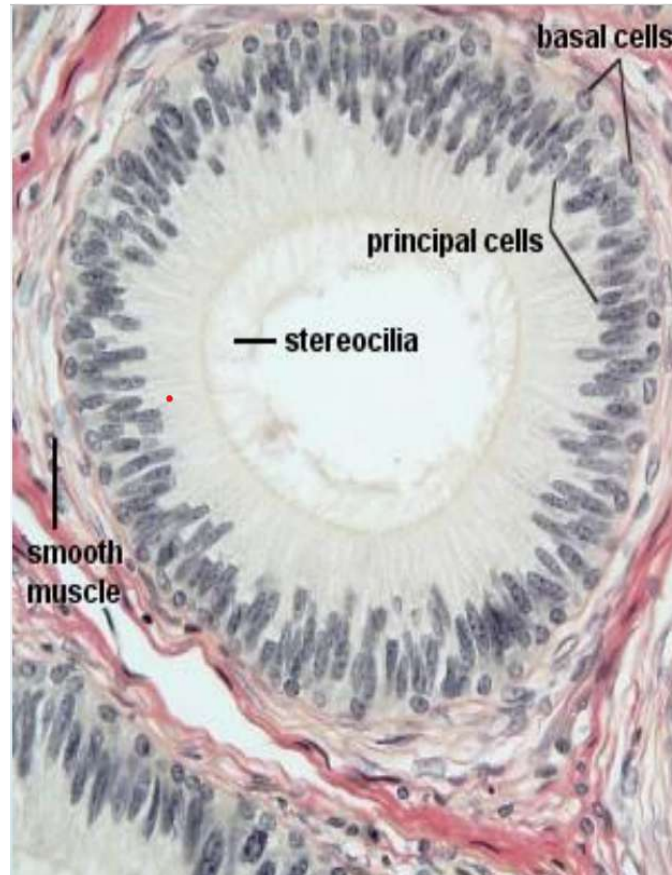
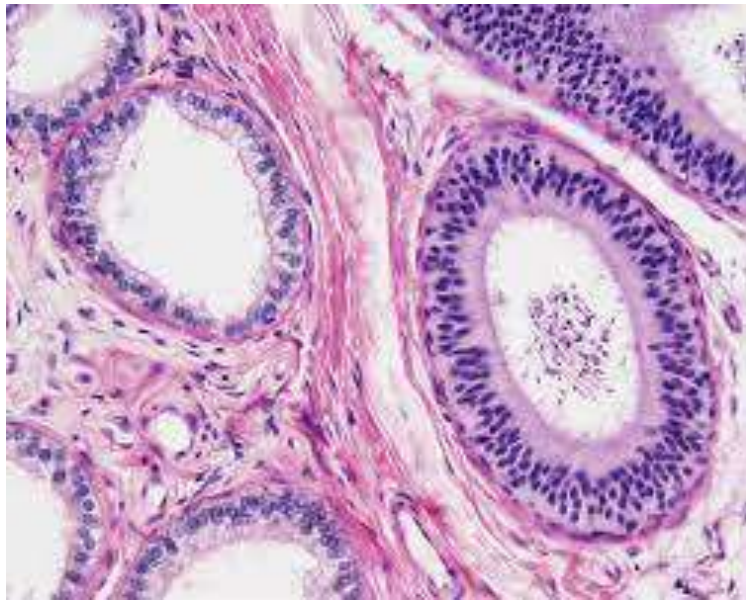
adventitia حوالیه

# Epididymis

Secretes seminal fluid

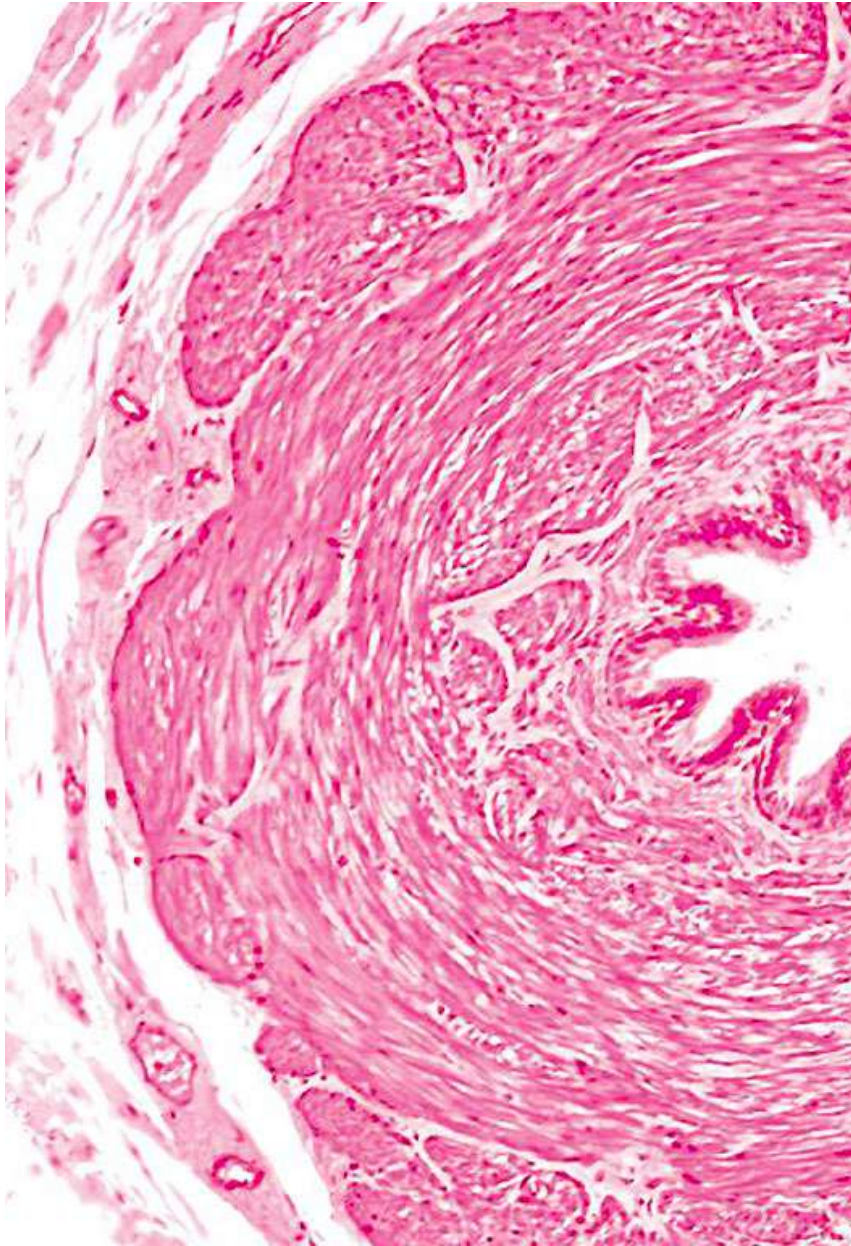
Appreciate the following:

- **Type of epithelium** → Pseudostratified ciliated columnar
- **Shape of lumen**
- **Stereocilia** → Regular
- **Smooth muscles**

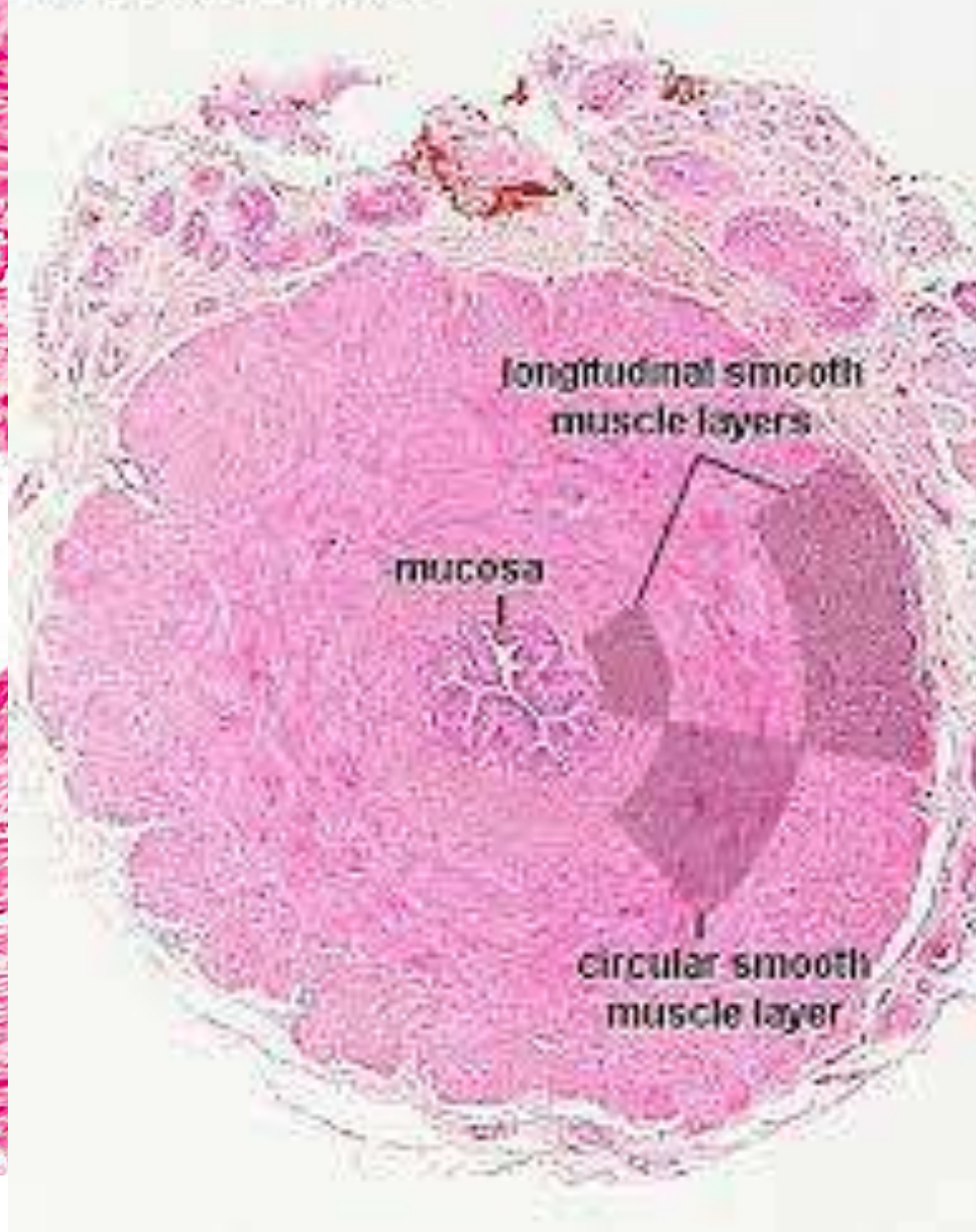




## Ureter



## Vas deferens H&E

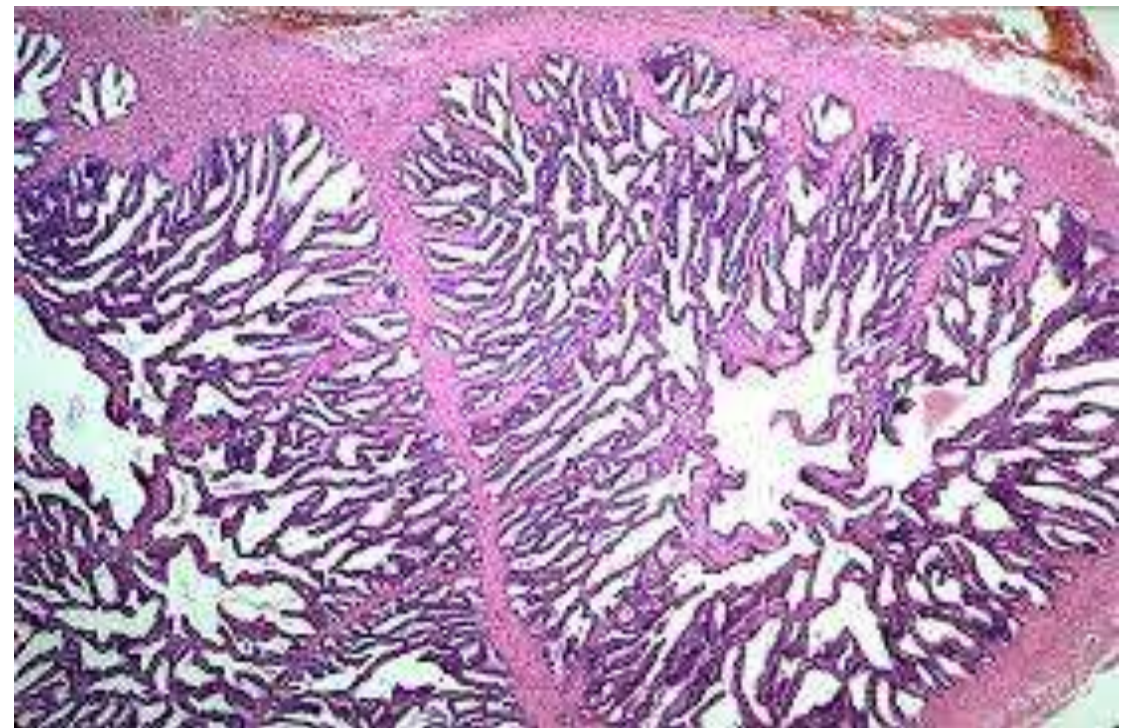


\*بنفرق بينهم من ال muscular layer و من نوع ال epithelium تذكروا ال ureter نوعه transitional



# Seminal Vesicle

- Surrounded by dense connective tissue capsule
- Notice excessive epithelial foldings
- Distinguish two smooth muscle layers in muscularis





# The Prostate Gland

## Notice

- **The tubuloalveolar glands**
- **Fibromuscular tissue**
- **Prostatic urethra**
- **Ejaculatory ducts (black arrows)**
- **The epithelial lining**
- **Corpora amylacia**

↳ Discriminated epithelial cells  
later on will be calcified

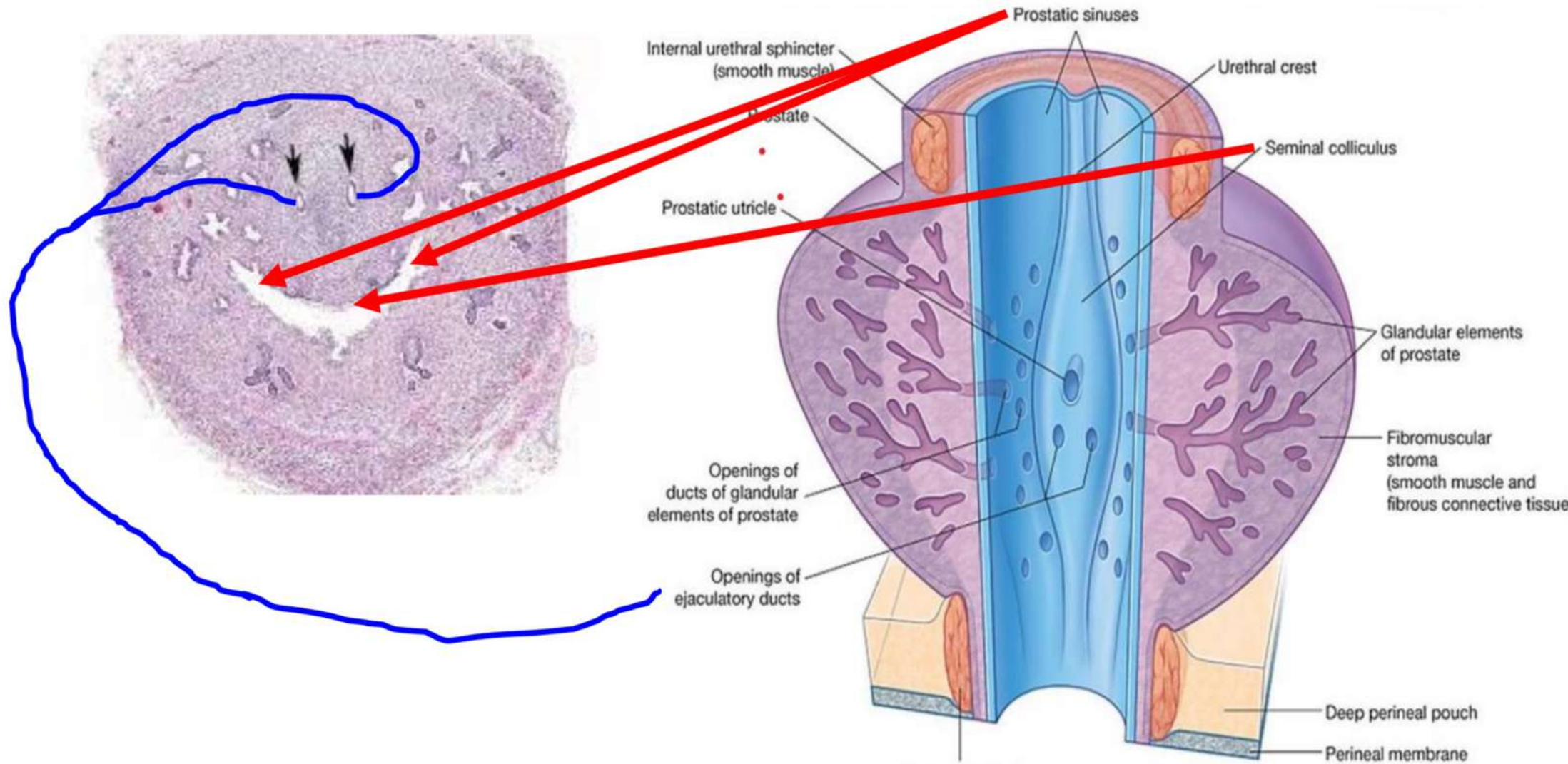


Urethra





# The Prostate Gland



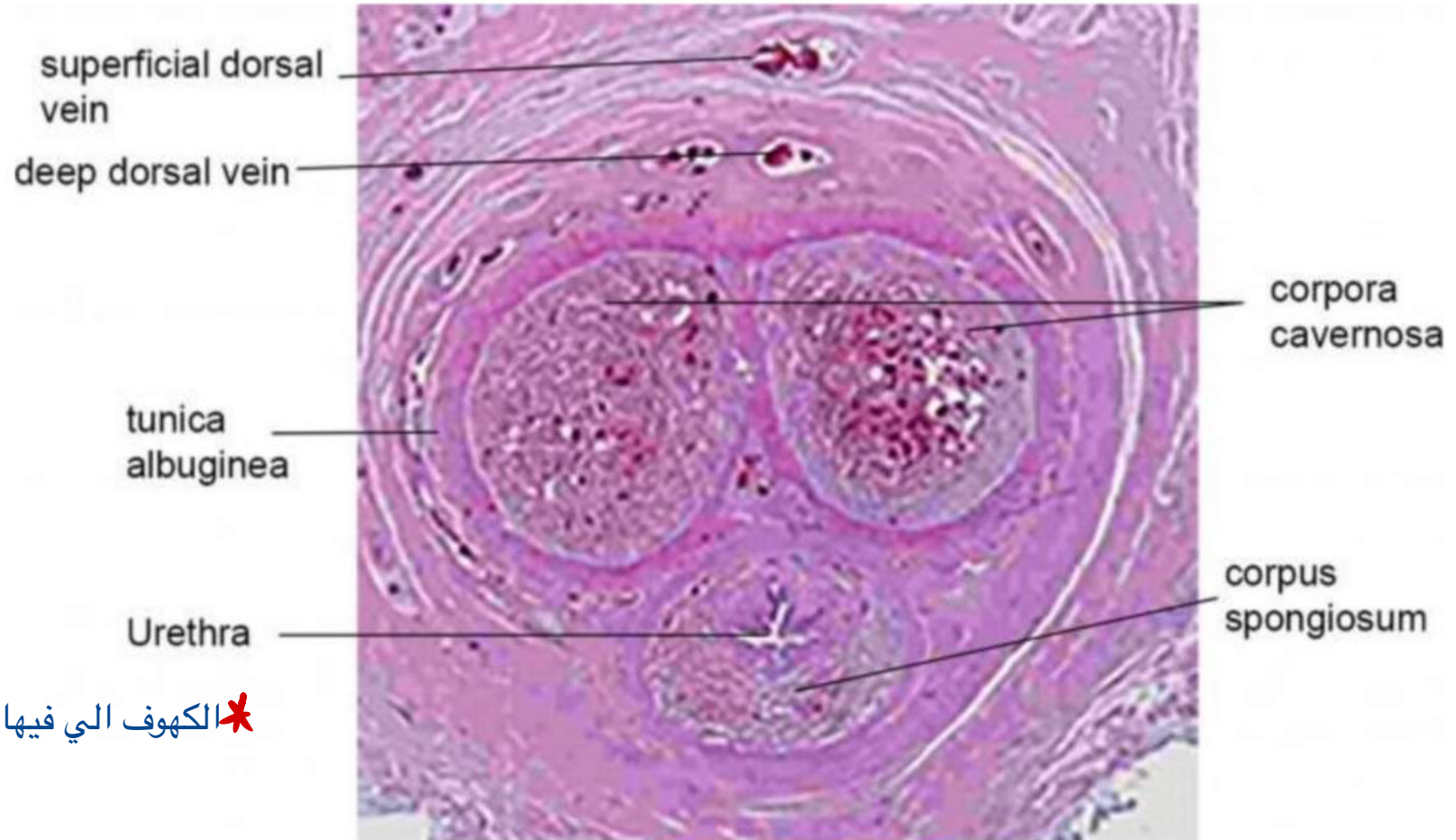


# Penis

## Notice:

- Tunica albuginea
- Corpora cavernosa
- Corpus spongiosum
- Penile urethra

blood vessels are lined by simple squamous \*الكهوف التي فيها ال

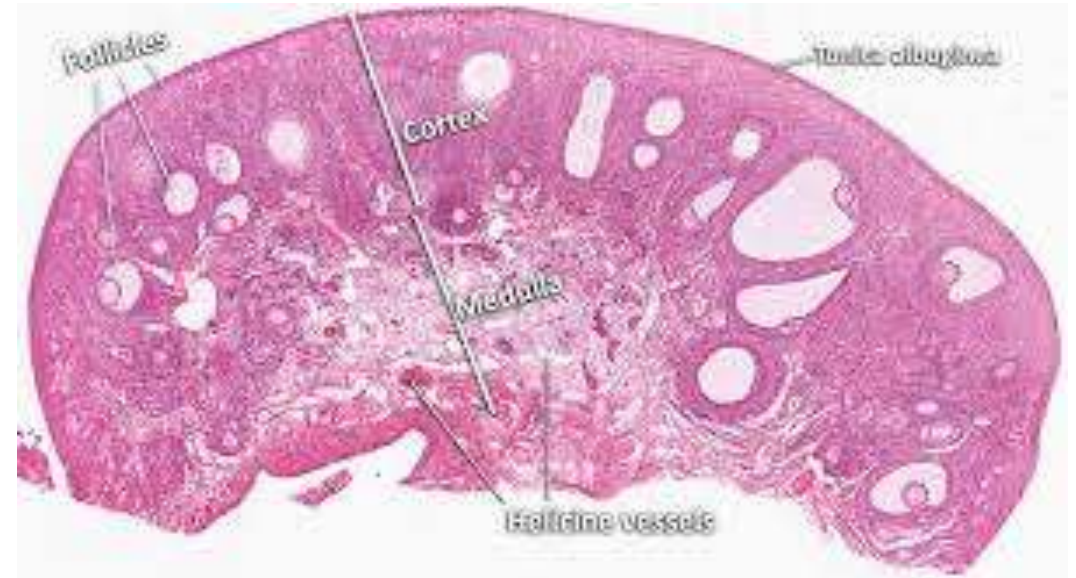


# The Ovary

Consists of:

- **Cortex filled with follicles** → Filled with blood vessels
- **Medulla filled with connective tissue**
- **Covered by germinal epithelium**
- **Tunica albuginea**

Cuboidal





# The cortex of ovary

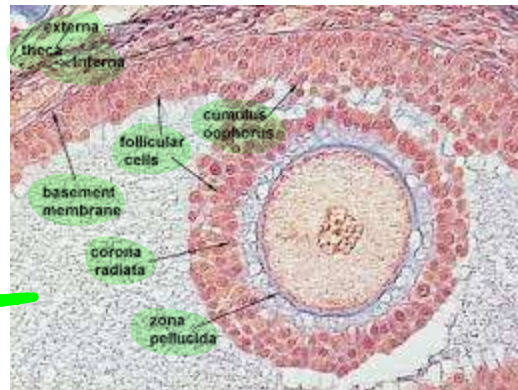
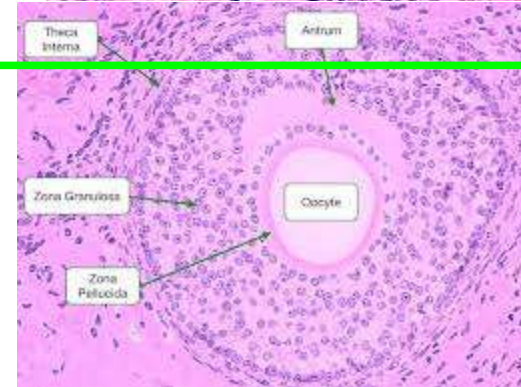
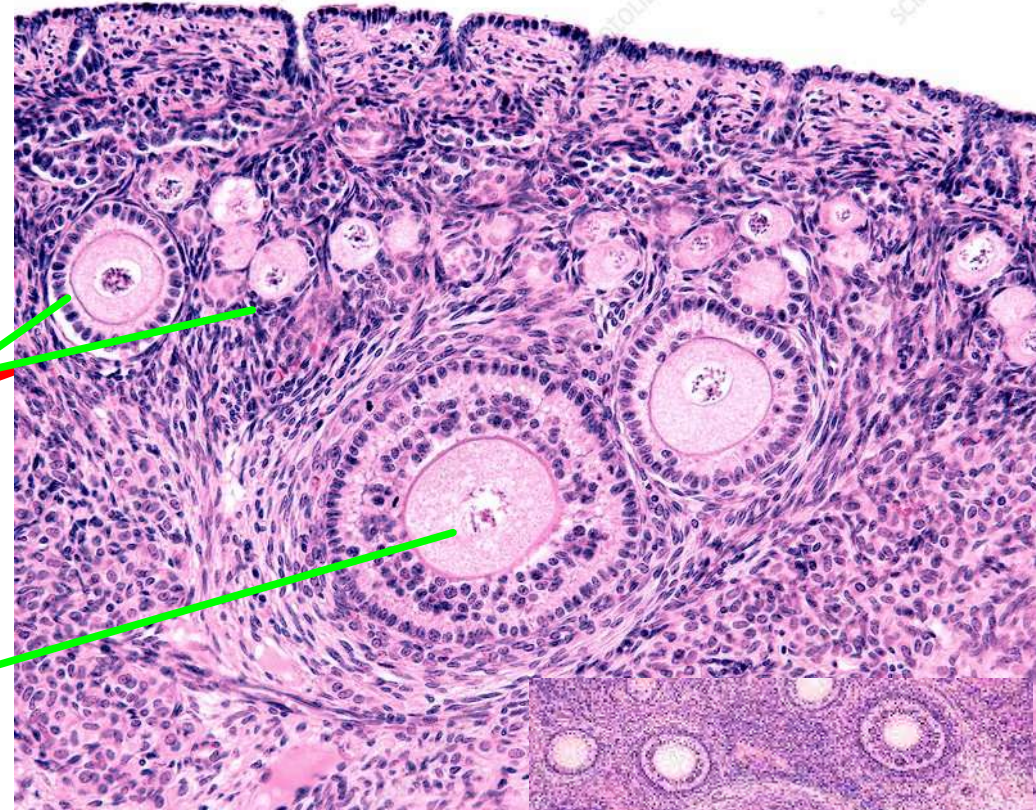
**Notice** ✦ Follicular cells → simple squamous

- **Germinal epithelium**
- **Tunica albuginea**
- **Primordial follicles**
- **Primary follicle (unilamellar)**
- **Primary follicle (multilamellar)**
- **Secondary follicle (antral)**

↳ Multiple layers and spaces

كل الأجزاء مهمة

Mature ovum



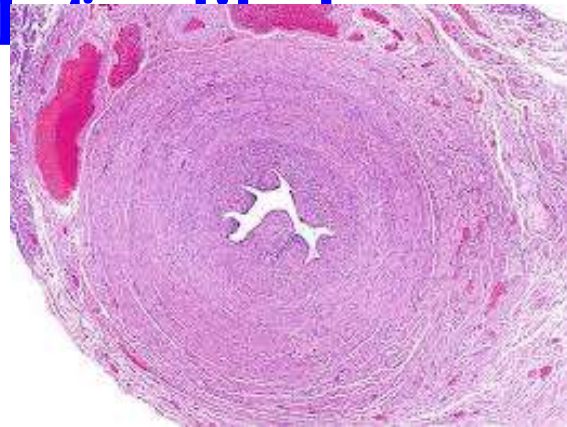


# Uterine Tube

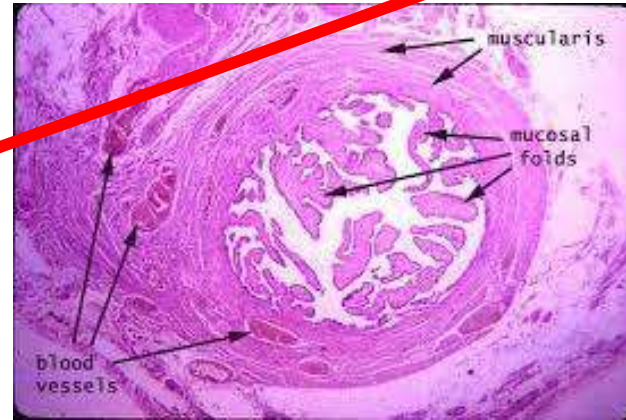
Identify the four regions of the oviduct:

Notice the complexity of folding of the lining mucosa

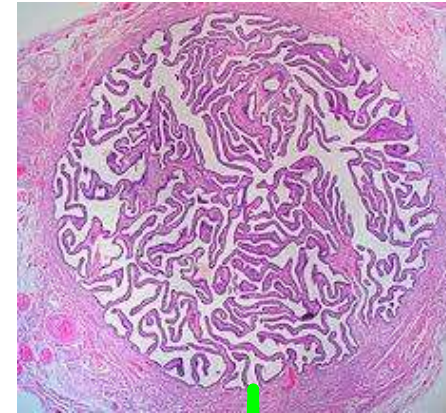
Intramural



Isthmus

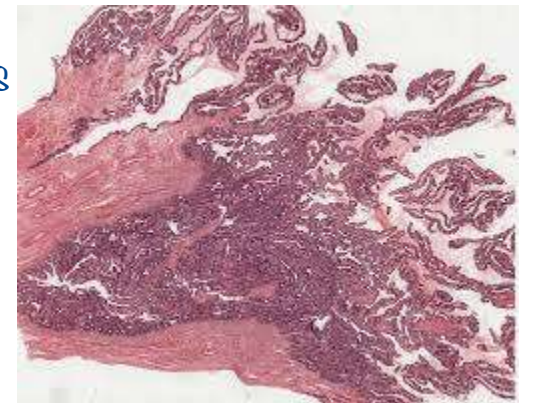


Ampulla



Extensive number of foldings

Infundibulum



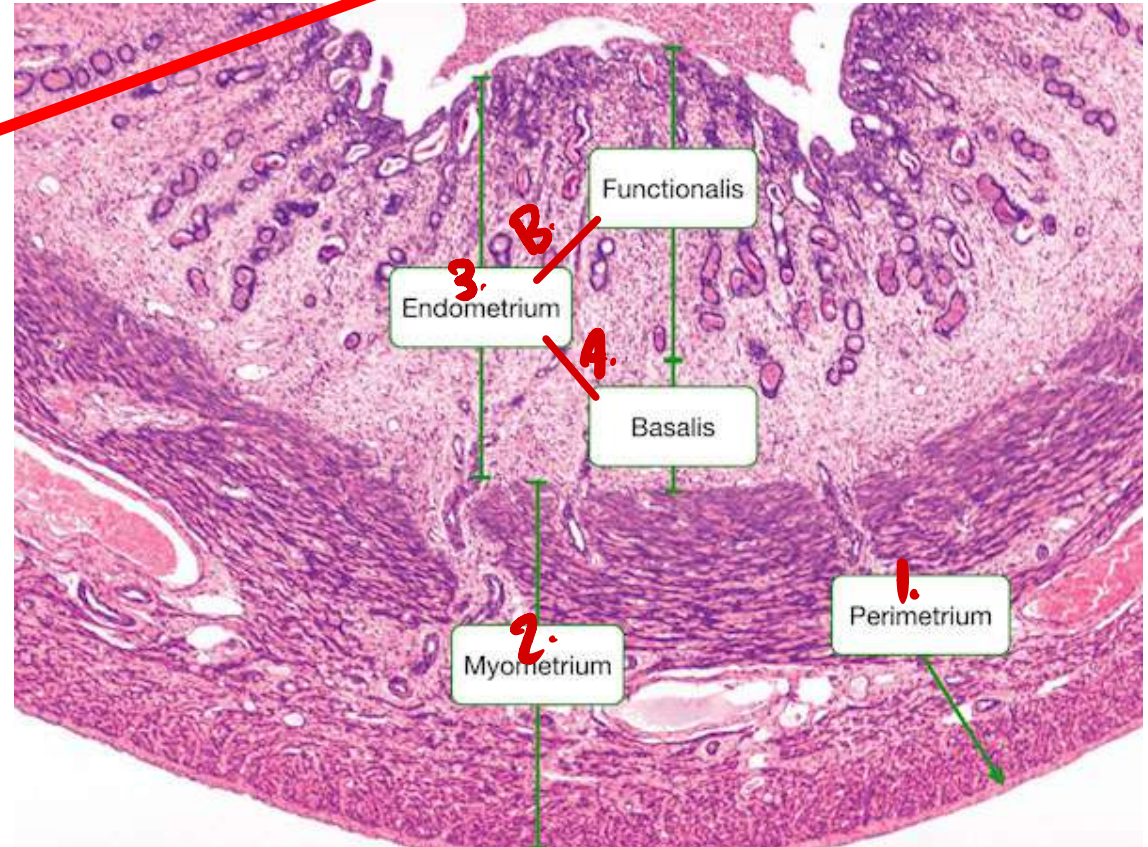


# The Uterus

## Notice

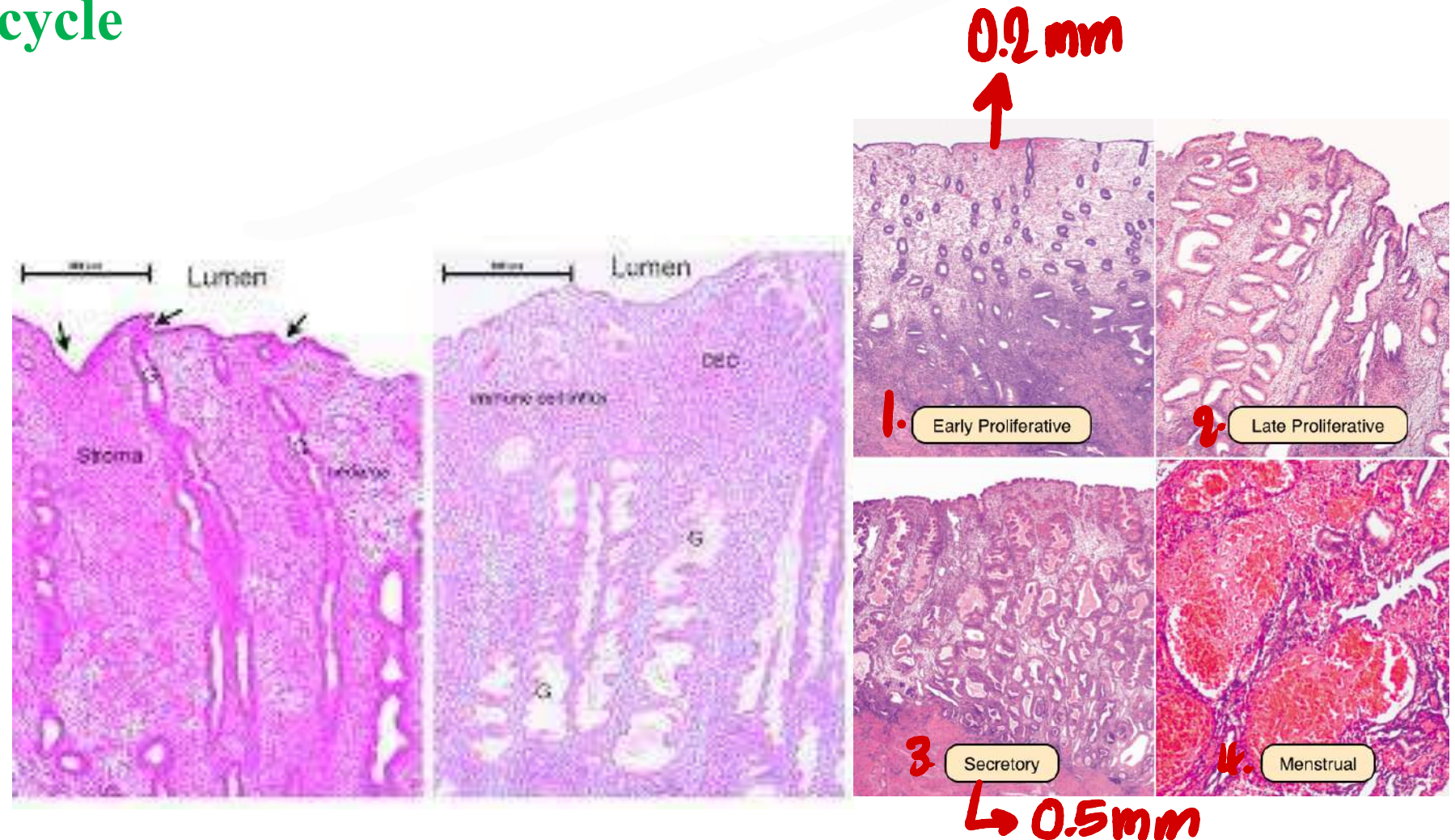
- **Endometrium with the glands**
- **Basal and functional layers**
- **Myometrium**
- **Perimetrium**

Secretes proteins



# Endometrium during the menstrual cycle

- Notice the differences in the endometrium in relation to the menstrual cycle





# The cervix of the Uterus

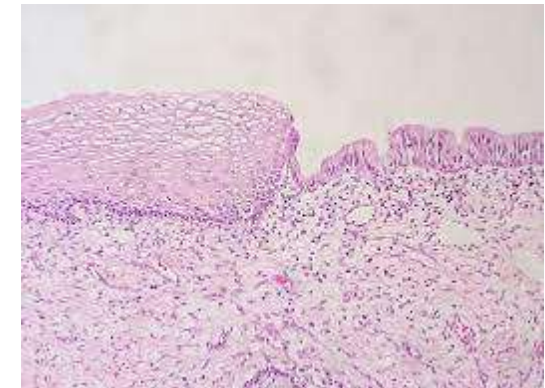
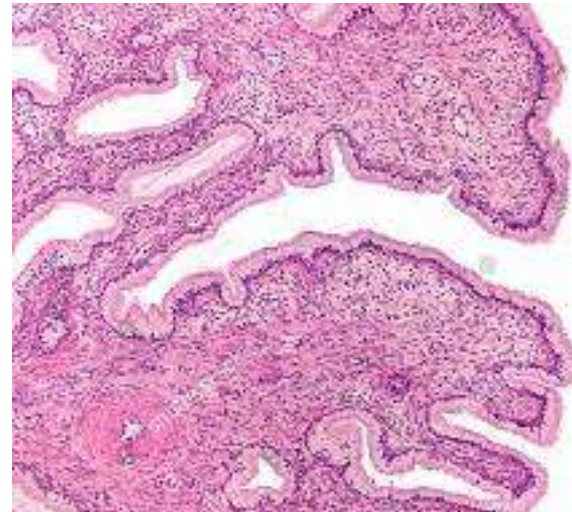
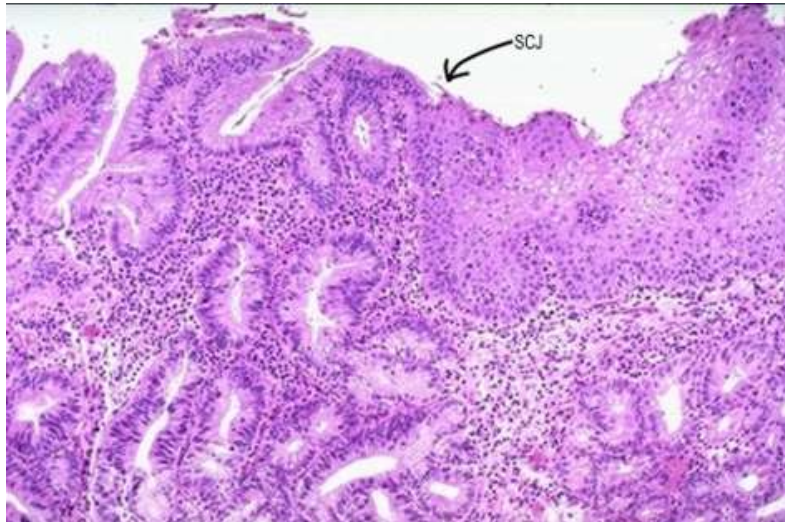
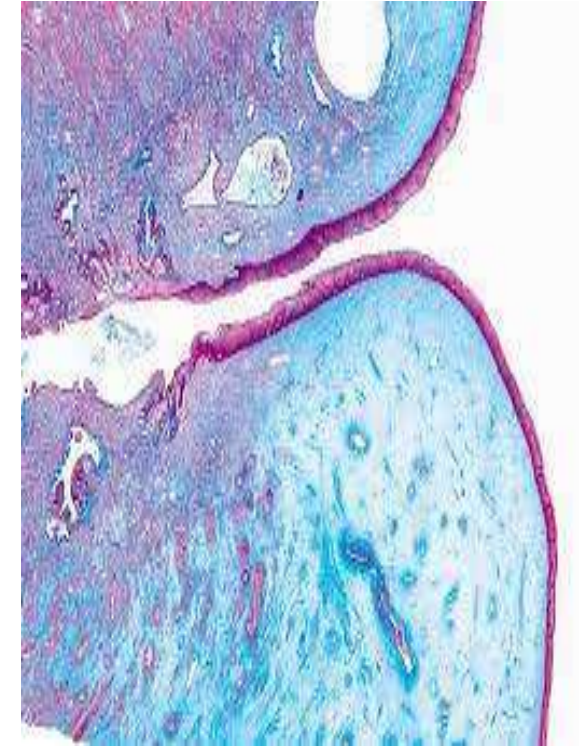
↪ Few smooth muscles, high in collagen fibers

↓ stratified squamous بصير uterus columnar ال في البداية يكون زي

## Notice

- The transition zone of epithelium
- The cervical glands

↪ Secrete mucus



# The Vagina

## Notice:

- The layers of the vagina
- Type of epithelium
- No glands

