

Male genital organs (2)

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Topics

- **Ductuli efferentes**

- **Epididymis**

- **Ductus deferens**

- **Ejaculatory duct**

- **Seminal vesicle**

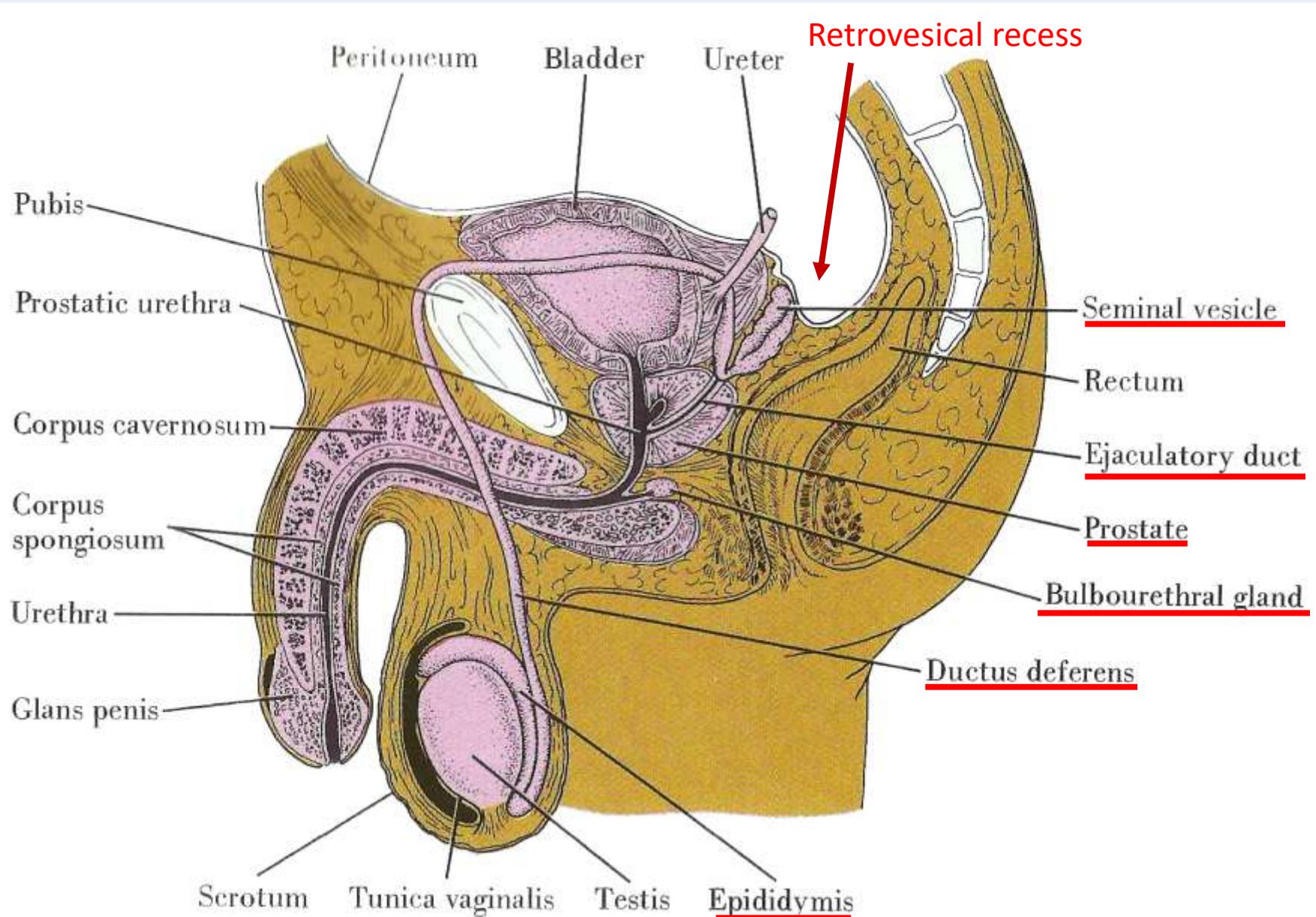
- **Prostate**

- **Bulbourethral glands**

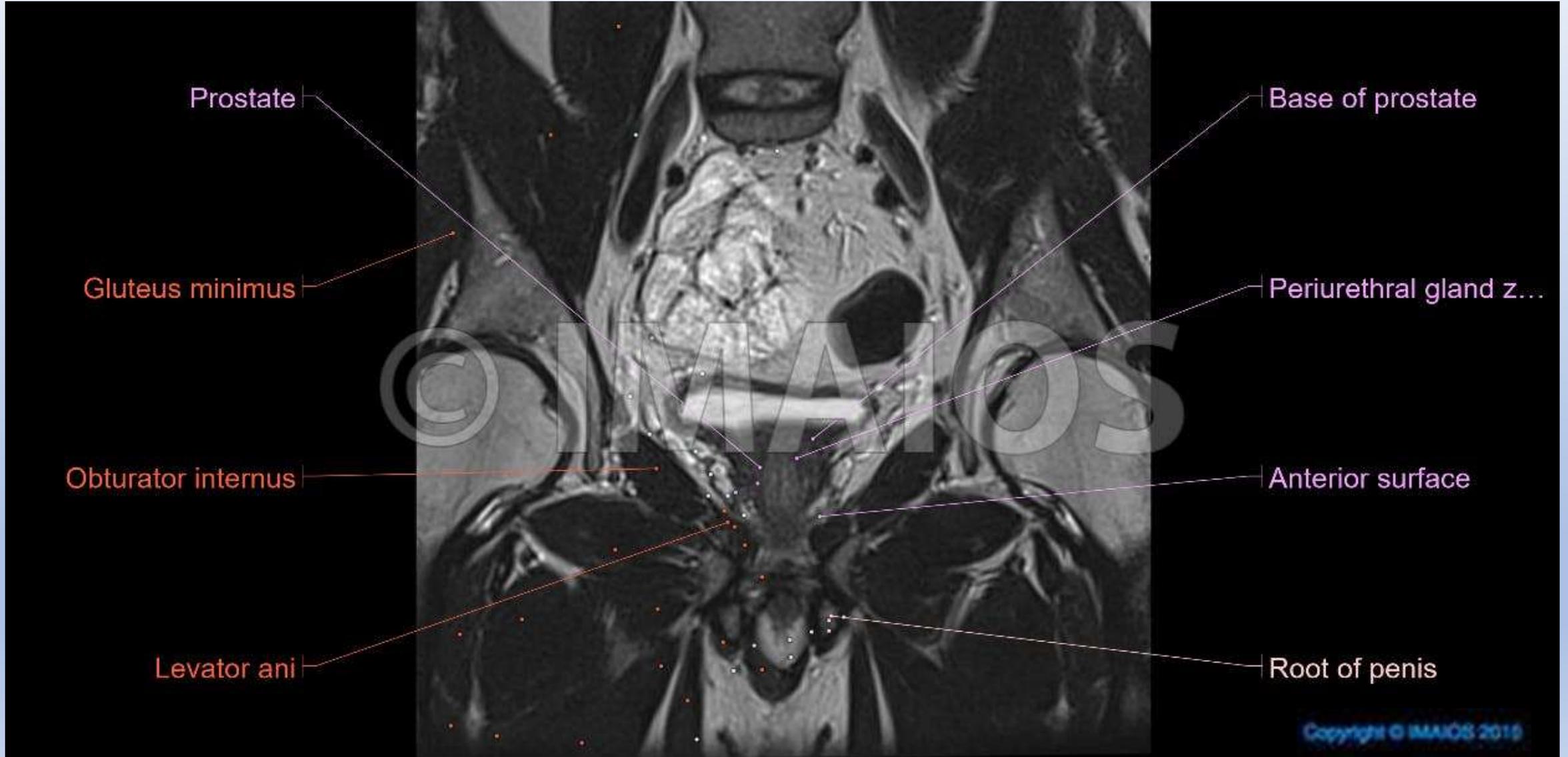
Genital ducts

Accessory sex glands

Male genital organs (schematic drawing)



Male pelvis (coronal section) (MRI)



Male pelvis, sagittal section, MRI



Epididymis

Comma-shaped, highly coiled tube
Lies along the superior and postero-lateral surface of the testis (consists of ductuli efferentes and ductus deferens)

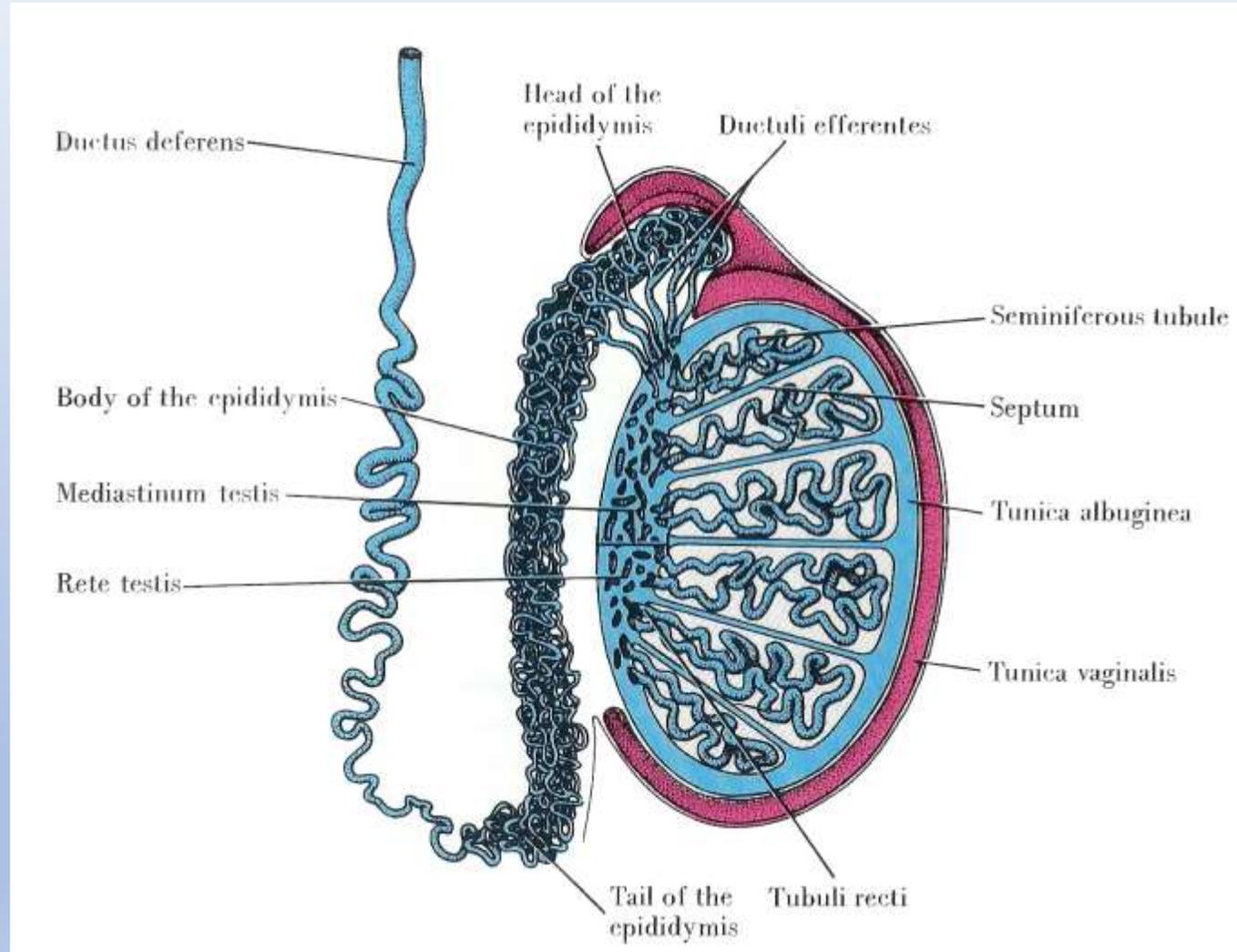
Function:

Spermatocytes undergo further maturation

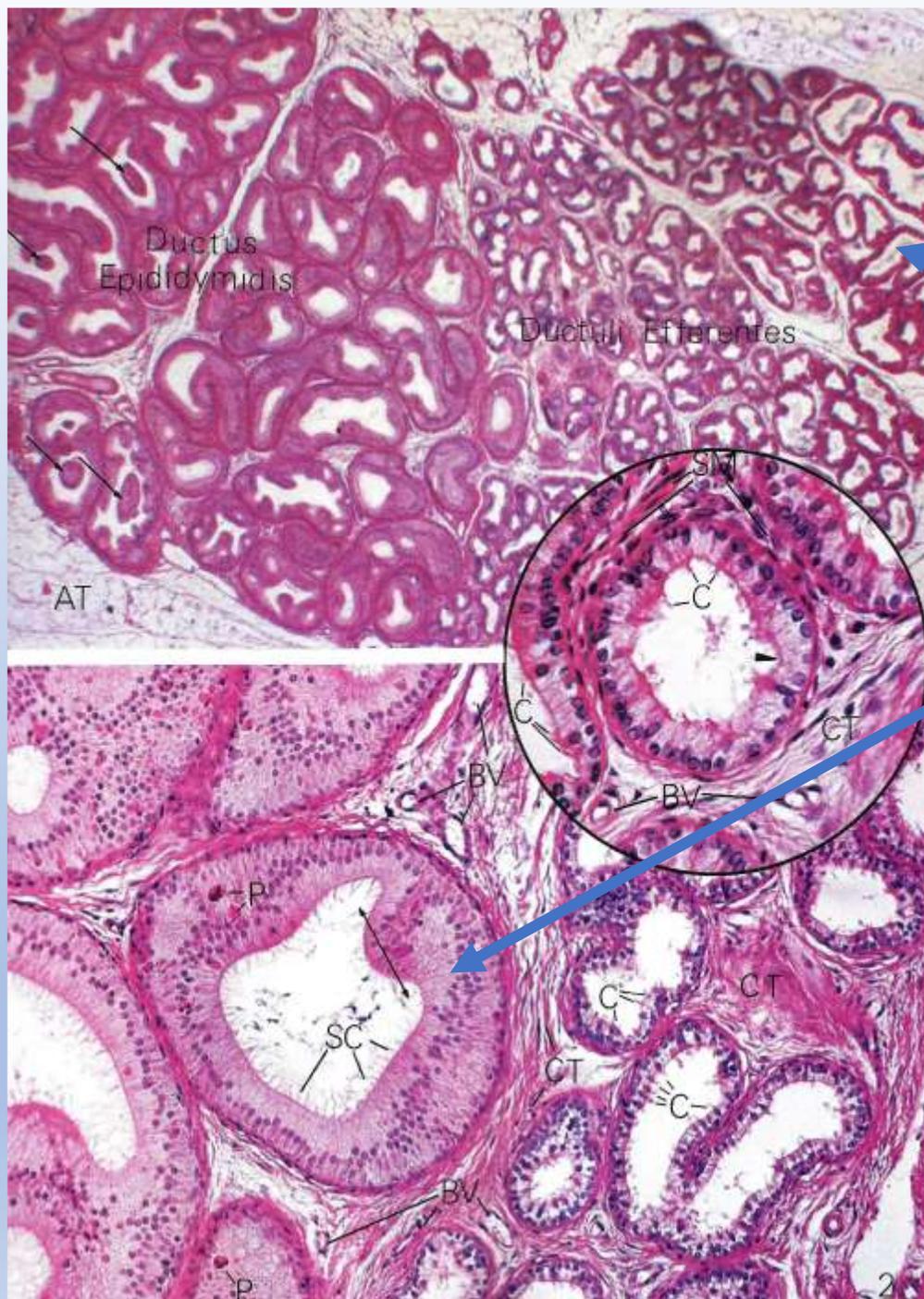
Storage of spermatocytes

Phagocytosis of degenerate spermatocytes (not ejaculated)

Expels spermatocytes to the ductus (vas) deferens



Histology of the epididymis



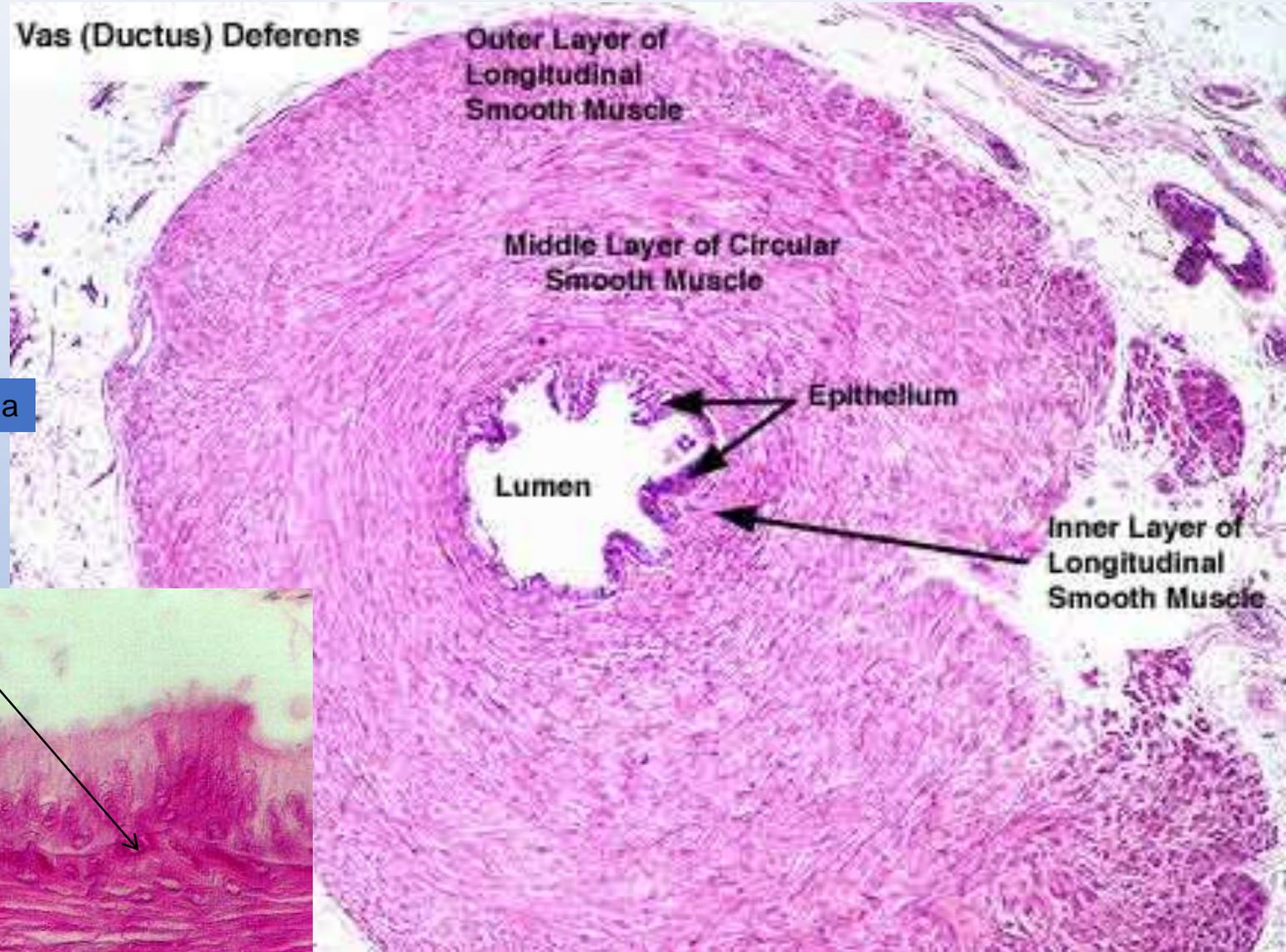
Ductuli efferentes:

pseudostratified or simple cuboidal or columnar (with or without cilia)

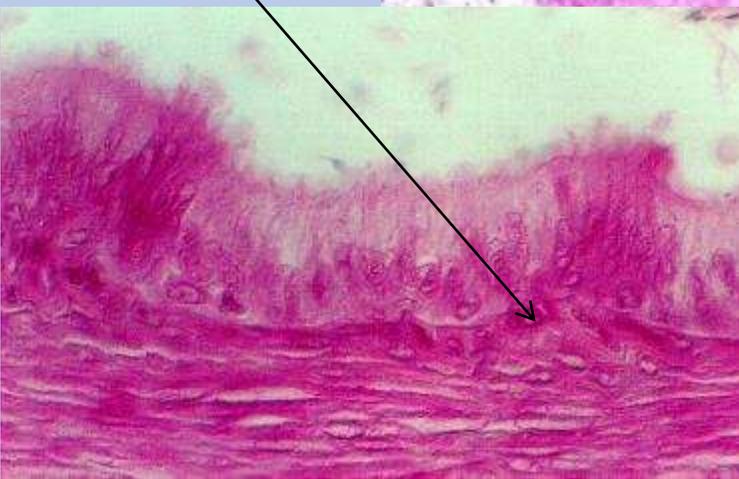
Ductus epididymis: two layered ciliated epithelium (basal cells and principal cells)

The tubules in both are surrounded by smooth muscle layers

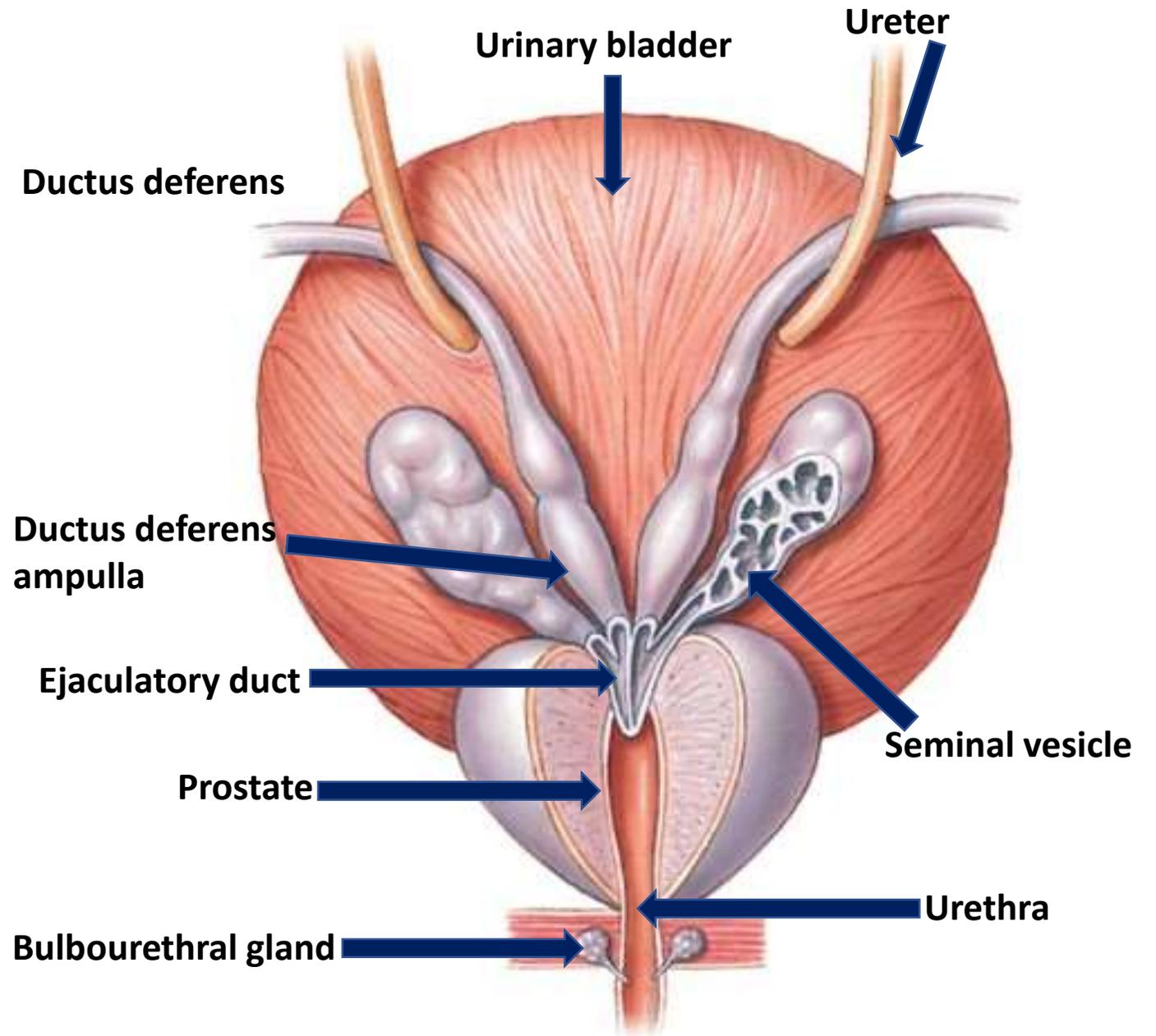
Ductus deferens



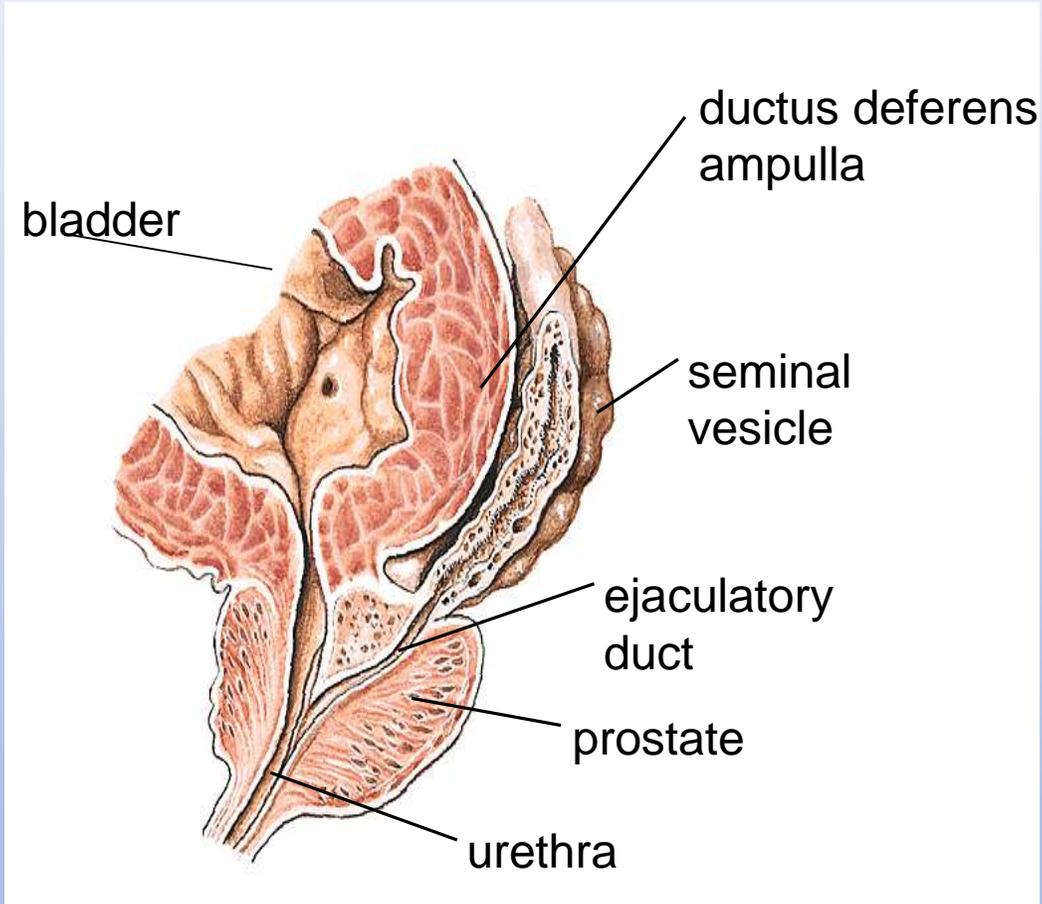
Fibrous lamina propria



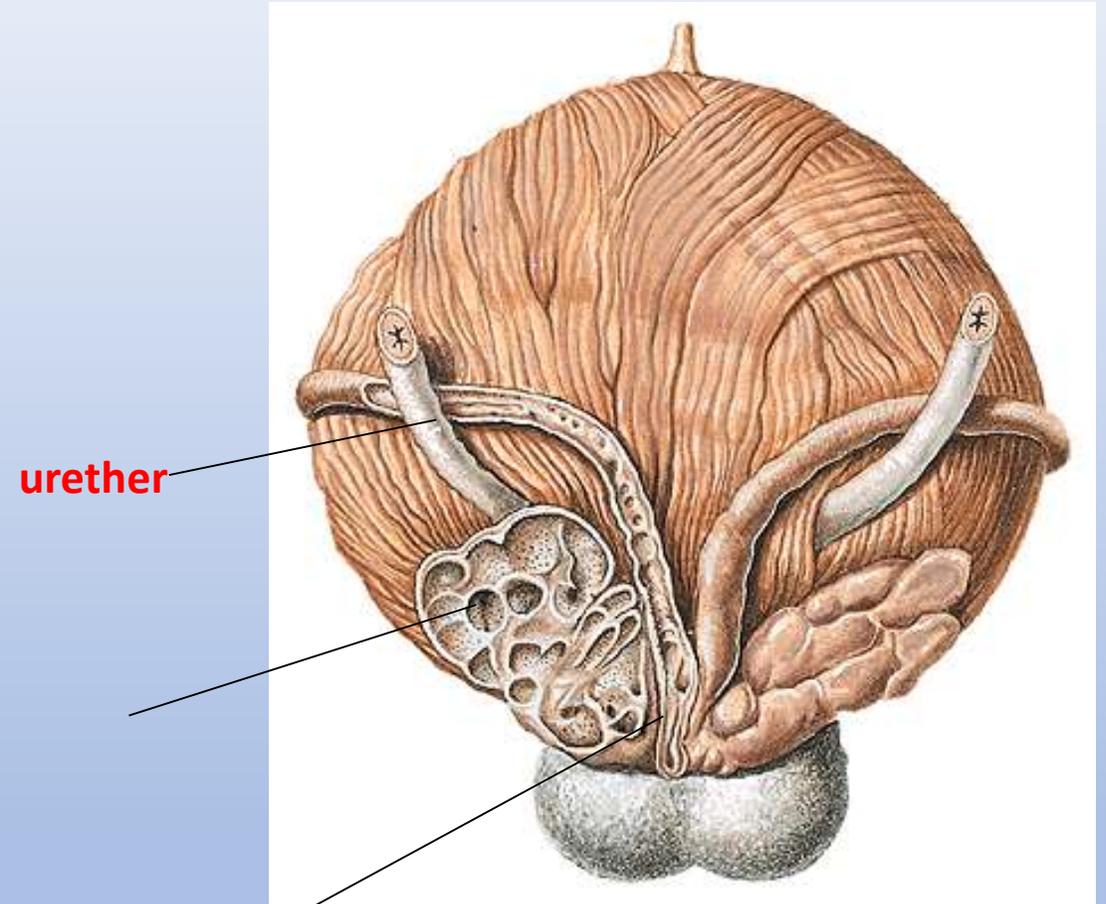
Posterior view of the accessory sex glands



Seminal vesicle and prostate



sagittal section



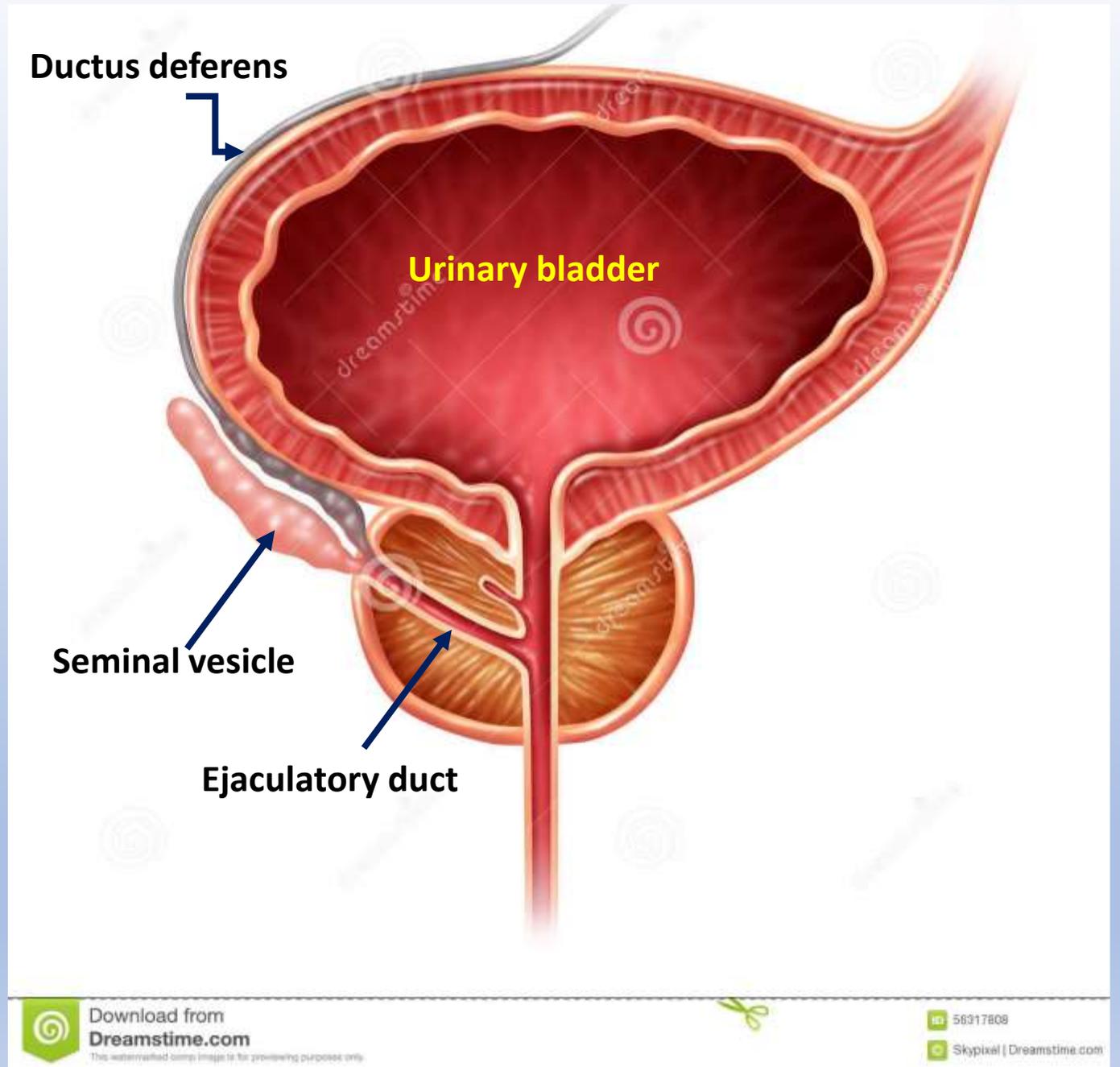
posterior v.

Schematic drawing of the seminal vesicle and the ejaculatory duct

**Blood supply: middle rectal a.
inferior vesical a.**

**Function: secretion of yellowish
fluid rich in fructose
and in prostaglandins**

**Quick contraction of the muscular
wall during ejaculation (discharges
secretion and quick flush the sperm
into the prostatic urethra**



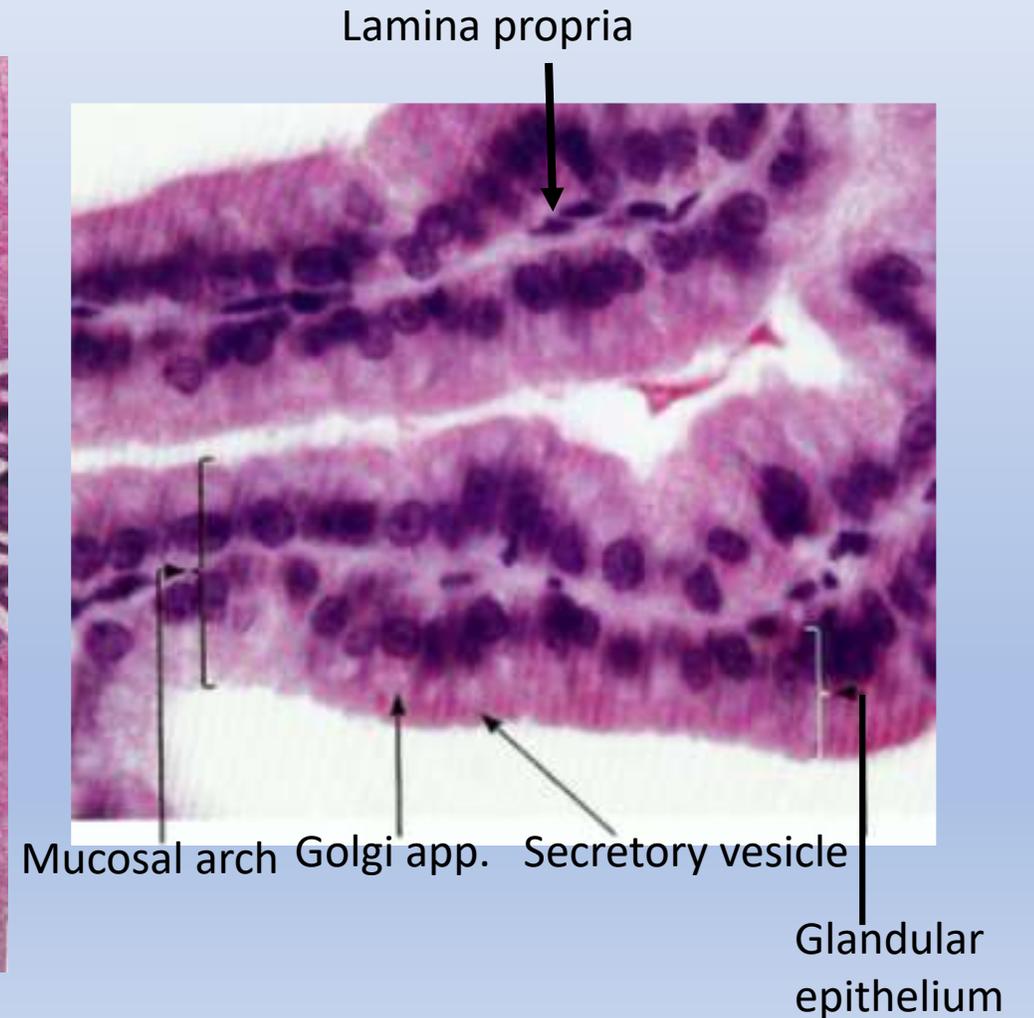
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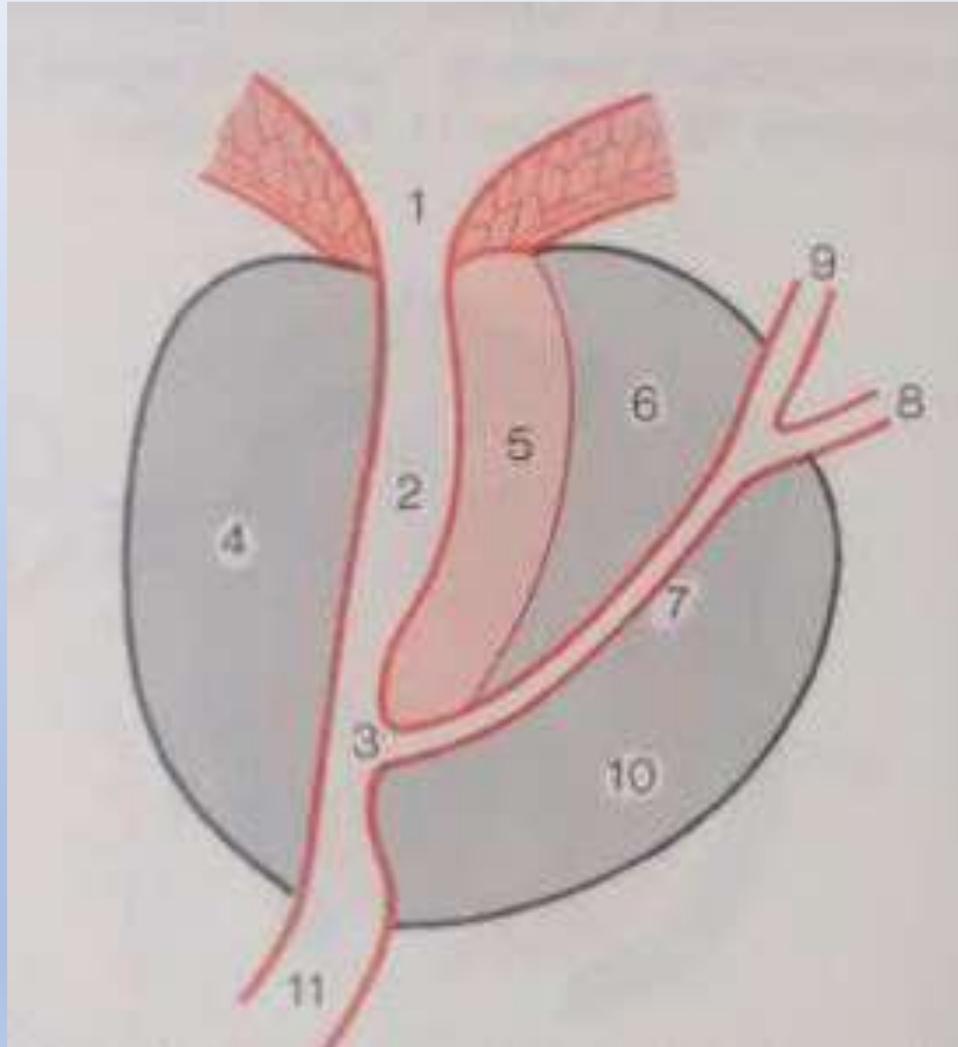
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Seminal vesicle (cross section)



Prostate

1. Cervix vesicae
2. Urethra, prostatic part
3. Colliculus seminalis
4. Prostate - isthmus
5. Periurethral glands
6. Prostate – lobus medius
7. Ejaculatory duct
8. Excretory duct
9. Ductus deferens
10. Prostate –lobus posterior
11. Urethra, membranous part



Blood supply: middle rectal a.
inferior vesical a.
prostatic venous plexus
(internal iliac v.)

Lymph vessels: to internal iliac l. nodes

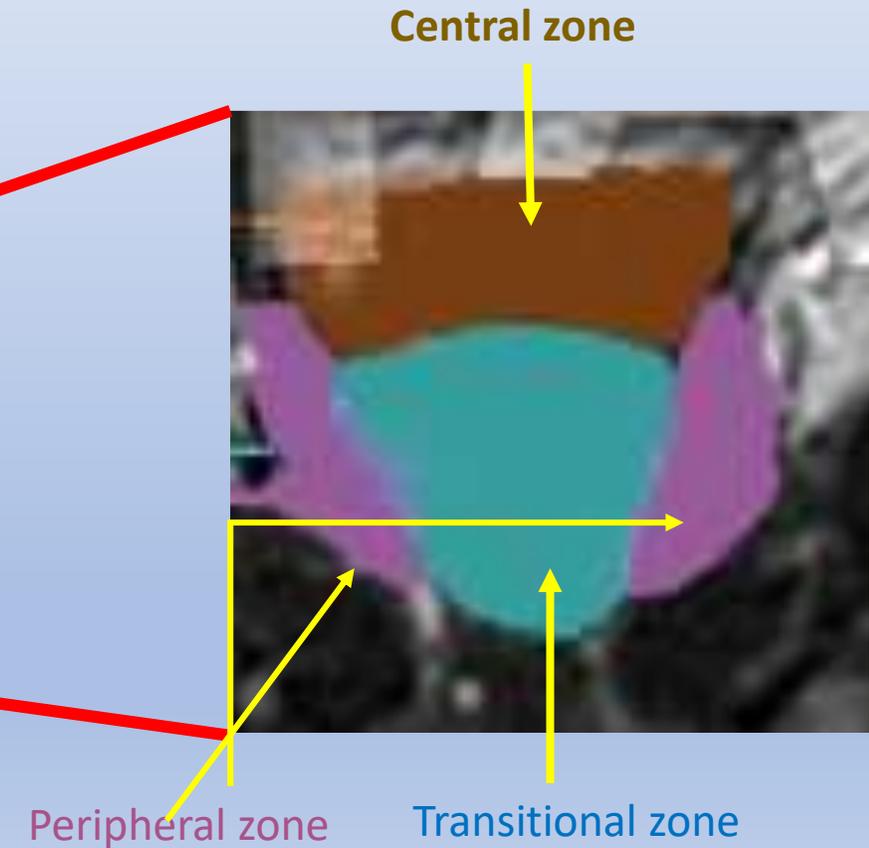
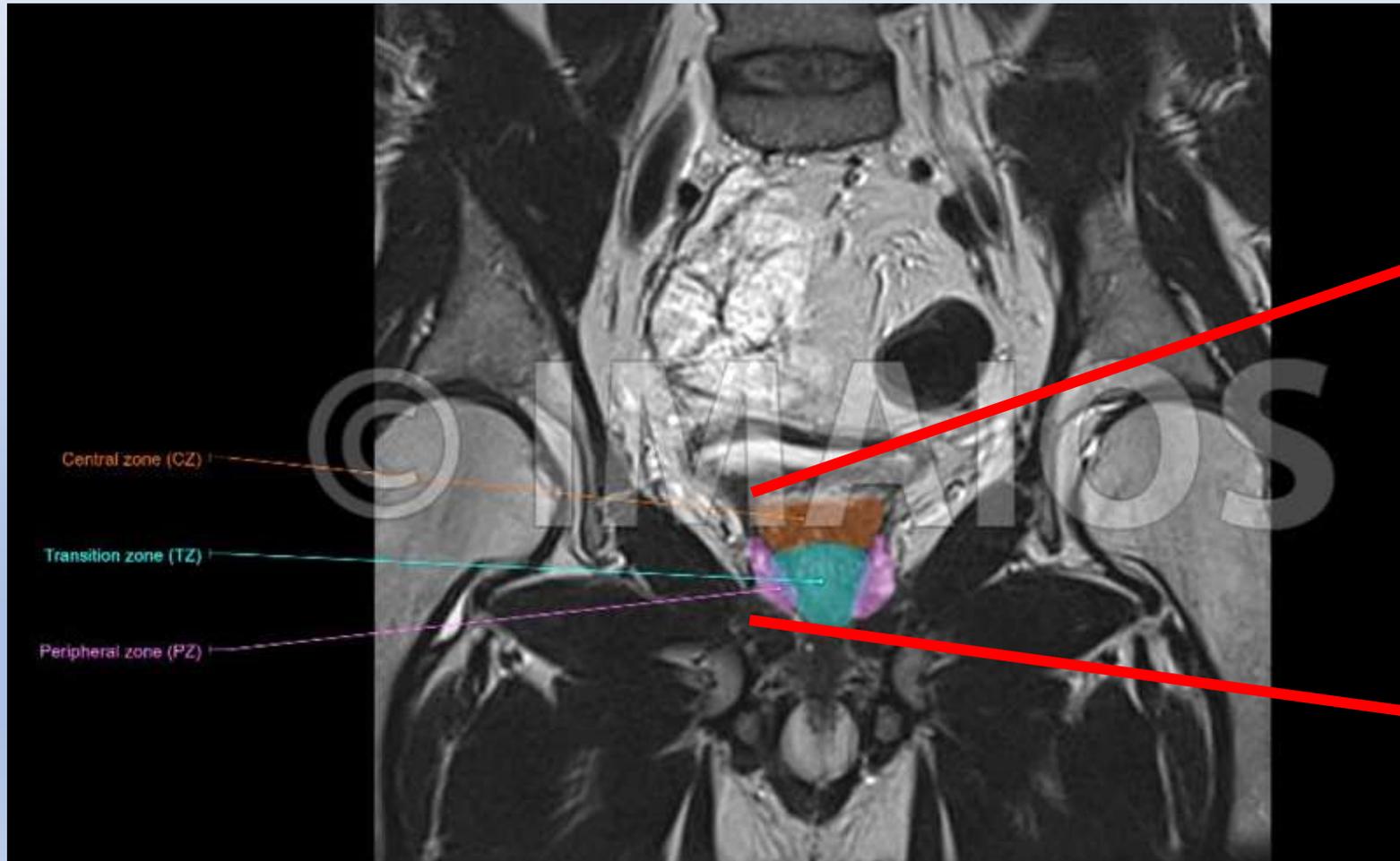
Contains: smooth muscles, fibroelastic CT

Glands: 30-40 tubulo-alveolar (merocrine-pseudoapocrine)glands

Division of glands: mucosal (surrounding the urethra)
submucosal (within the submucosa)
peripheral (main prostatic glands)

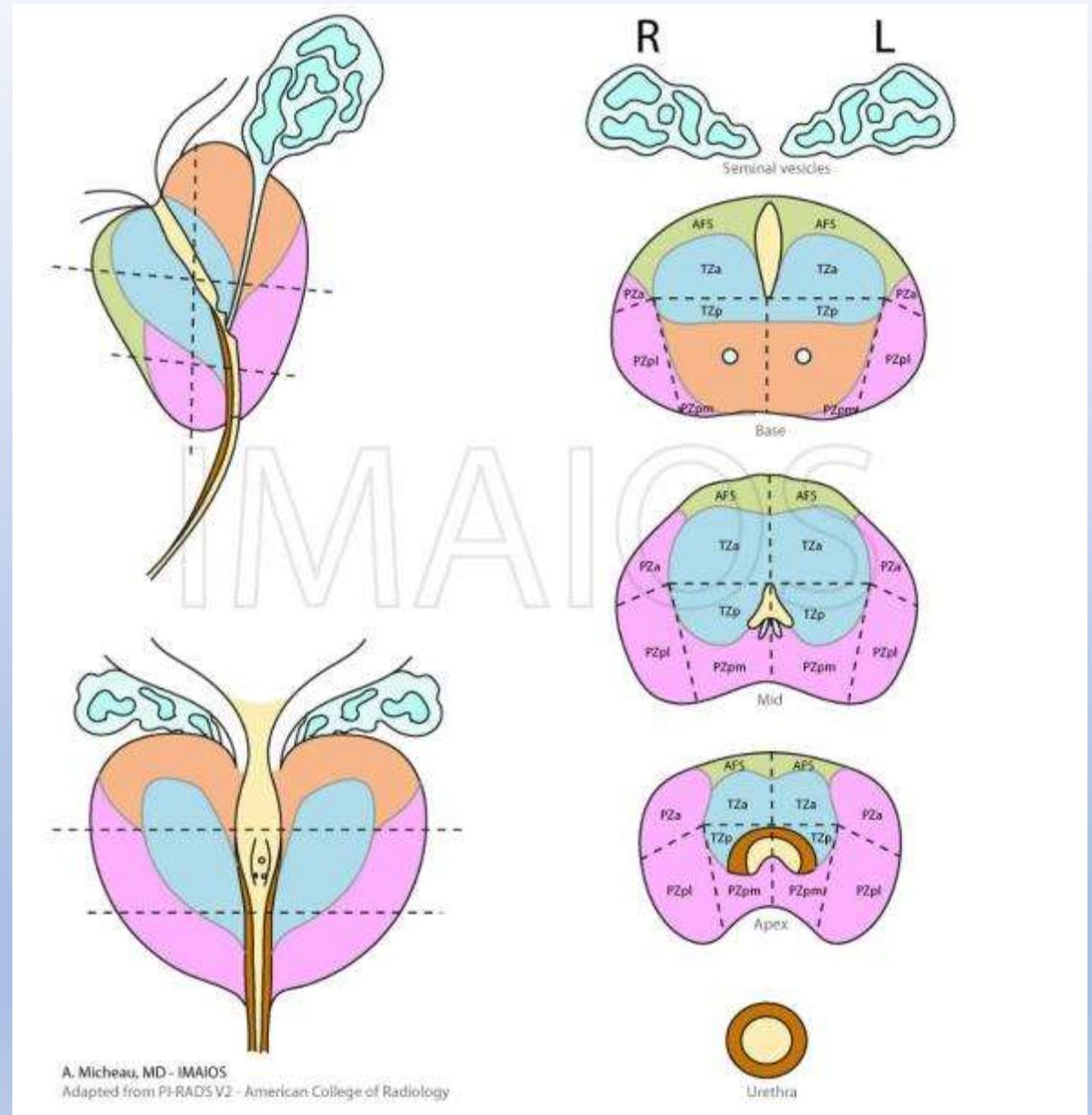
Secretory products: acid phosphatase,
citric acid, fibronolysin
prostaglandins

Anatomy of clinical zones of the prostate (MRI)

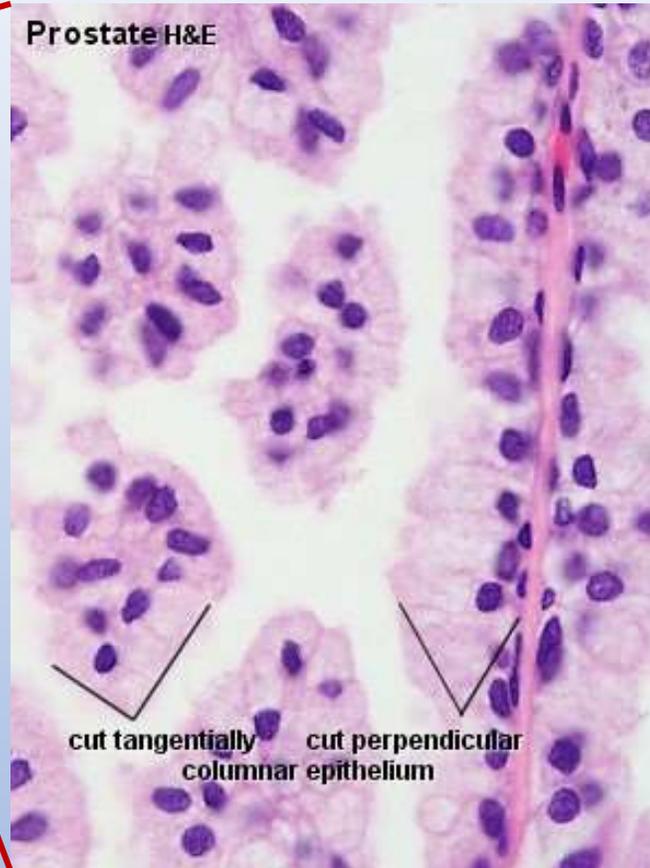
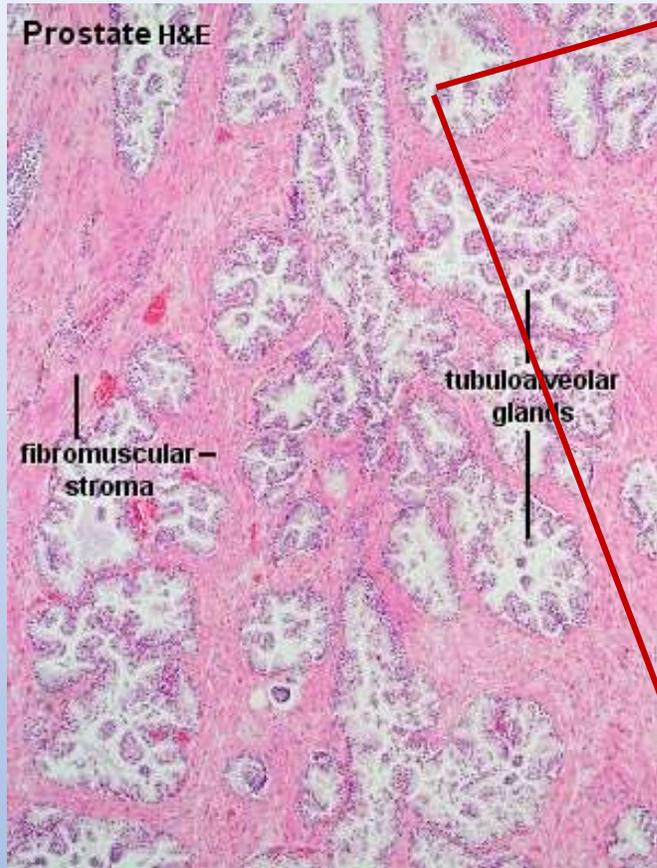


Division of the prostate

(clinical relations, different sections)



Prostate histological structure



Young men

Older men

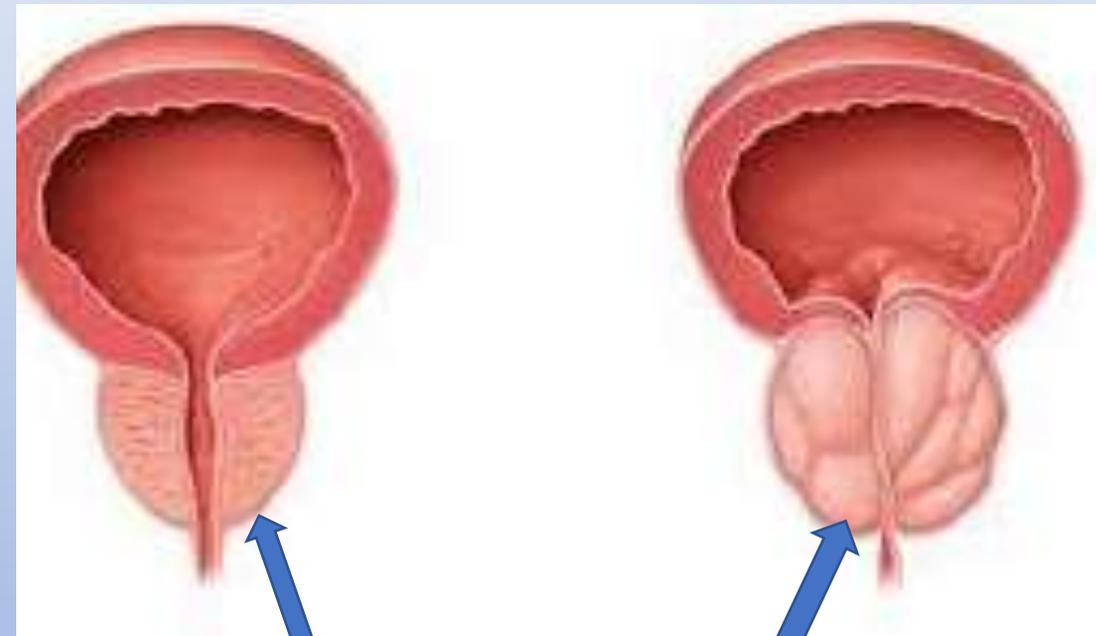
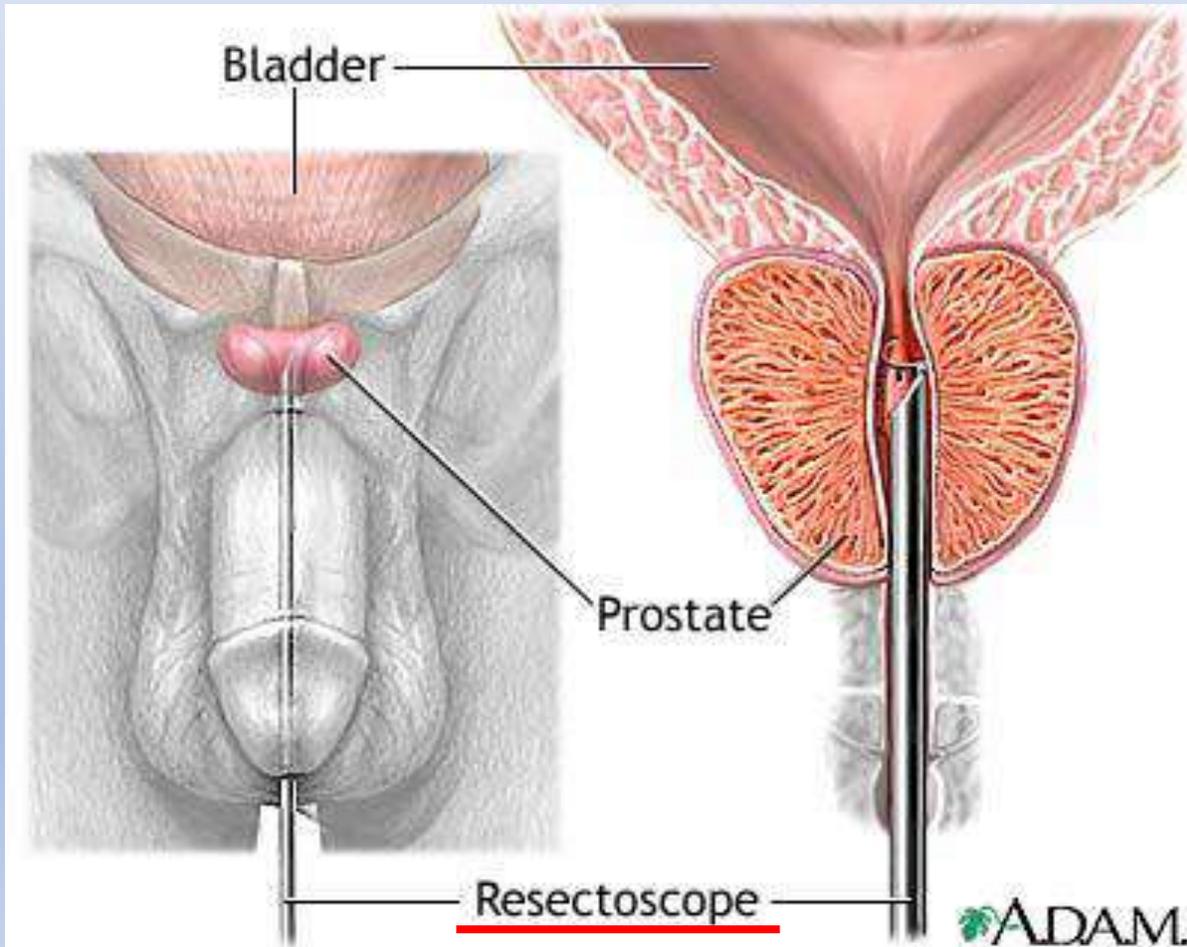
30-50 tubulo-alveolar gland

Squamous, cuboidal, columnar or pseudostratified epithelium

Fibroelastic connective tissue and smooth muscle

Prostatic concretions (corpora amylacea calcified glycoprotein) in elderly adult

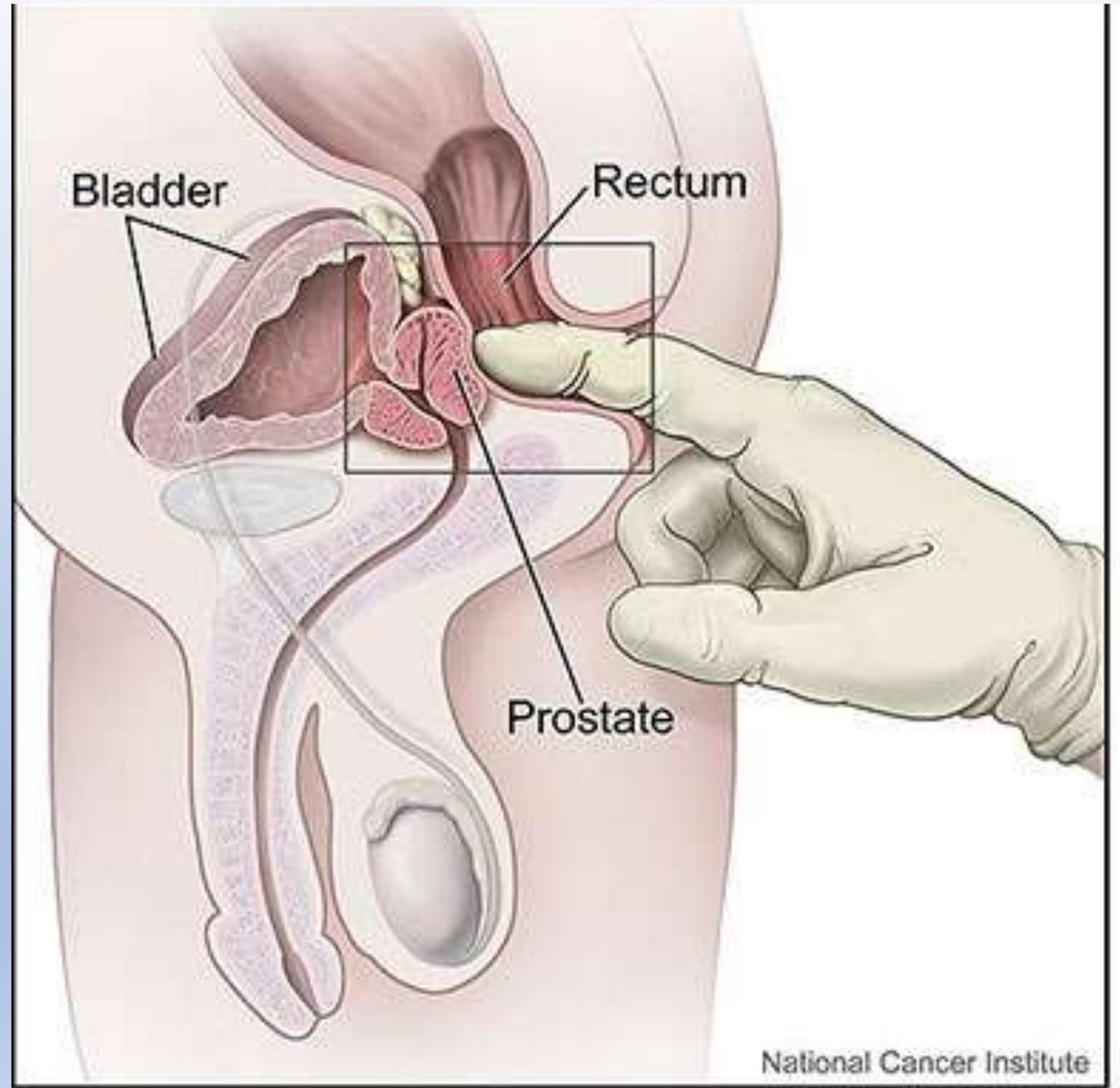
Prostate hypertrophy



Prostate, normal size

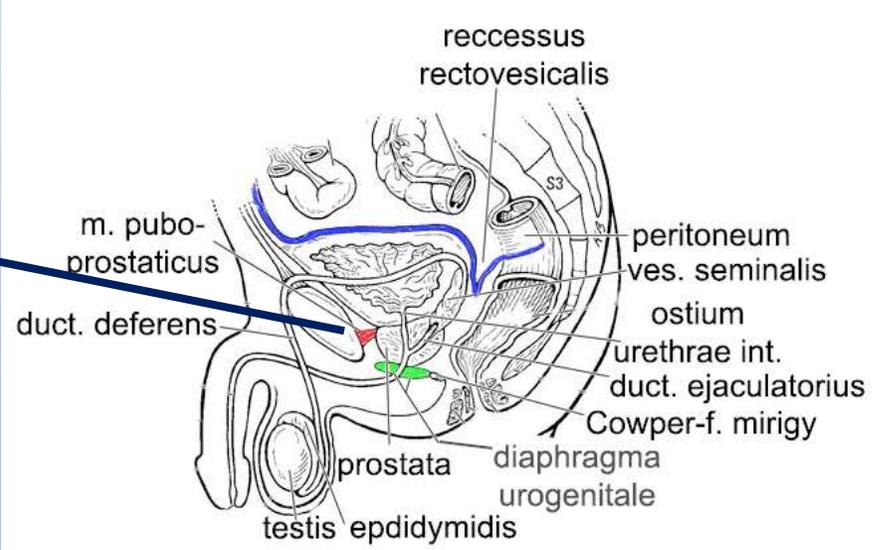
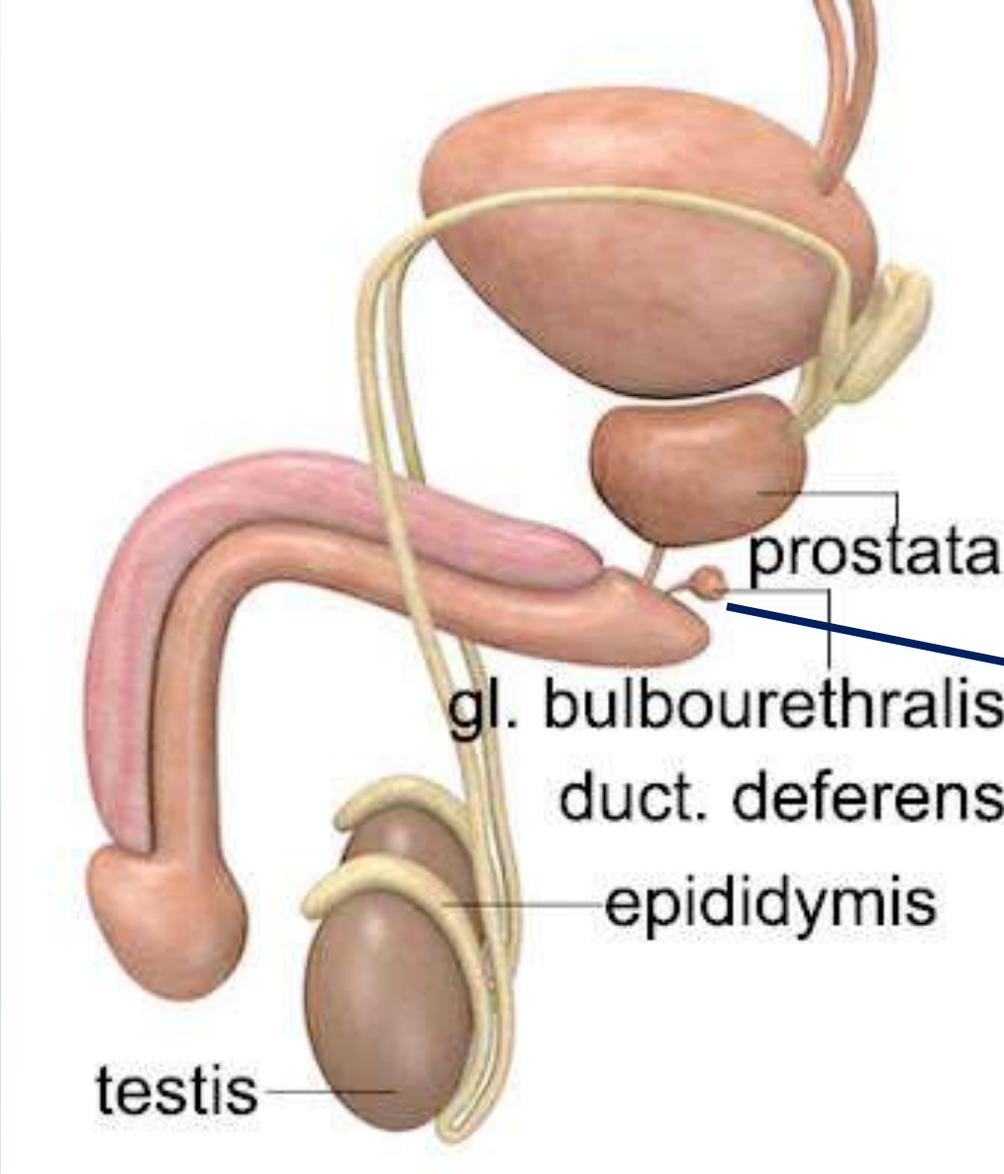
Prostatic hypertrophy (cancer)

**Examination
of prostate
through the
anal canal**



Bulbourethral (Cowper's)gland

Paired, pea-size glands, within the urogenital diaphragm
Compound tubulo-alveolar glands of mucous type
Low and high cuboidal epithelium
Secretion: galactose, galactosamin,sialic acid, methylpentose





THANK YOU FOR YOUR ATTENTION