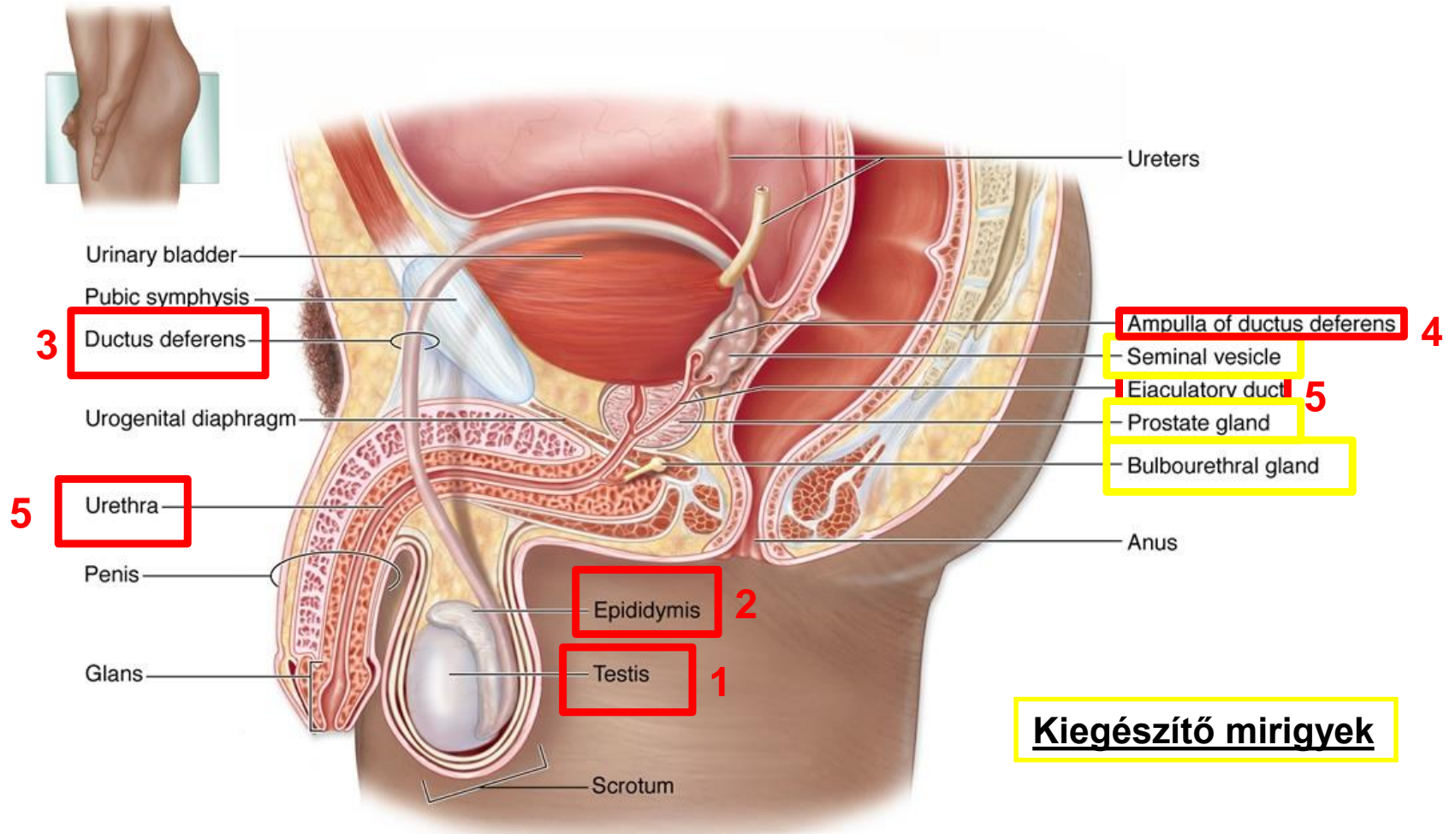


**Mellékhere, ondóvezeték és
ondózsínór, ondóhólyag, prostata
anatómiája.**

Dr. Hanics János

A férfi genitális rendszer elemei



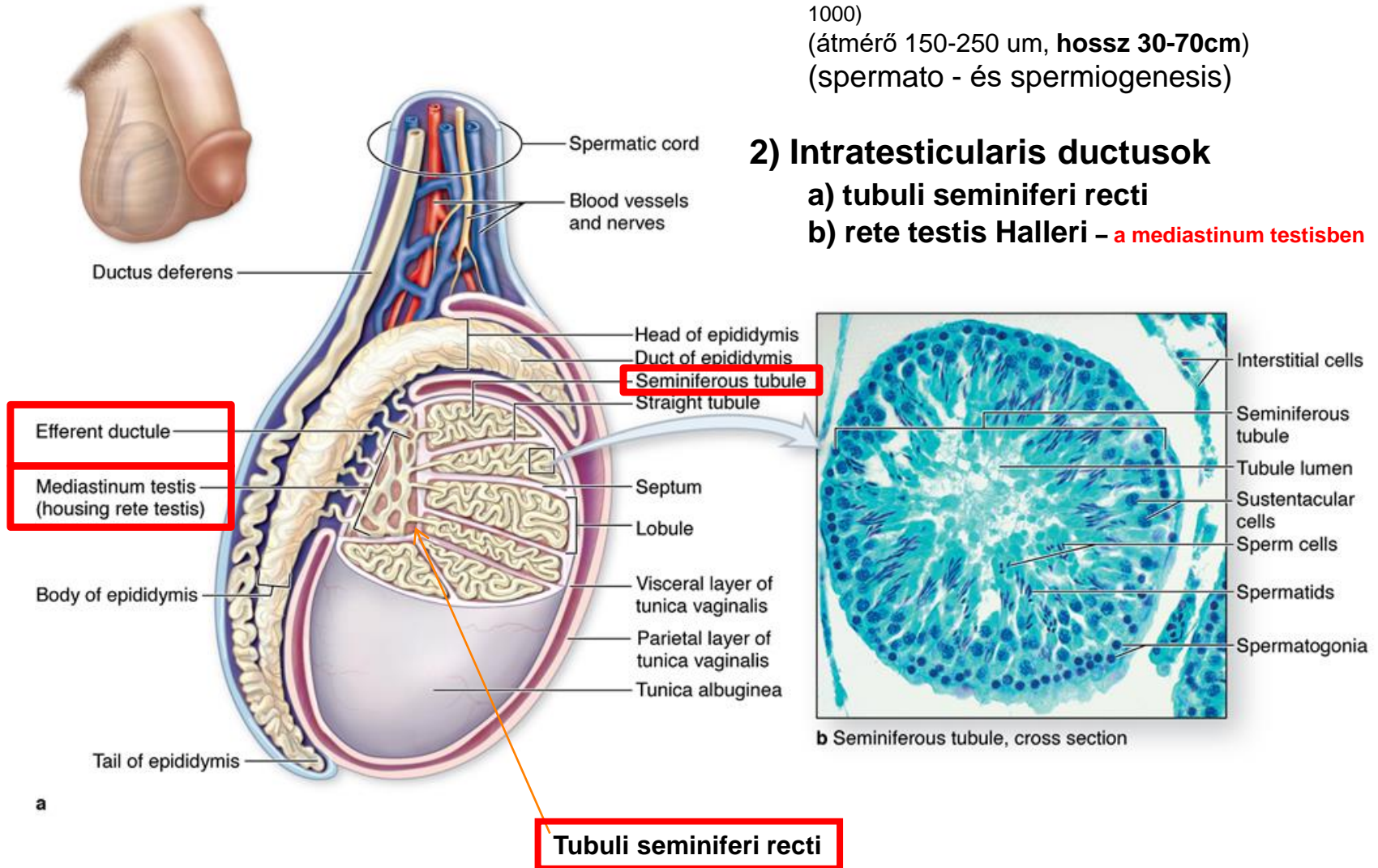
A testis (here) tubularis rendszere

- 1) **Tubuli seminiferi contorti** (számuk 250-1000)
(átmérő 150-250 μm , **hossz 30-70cm**)
(spermato - és spermiogenesis)

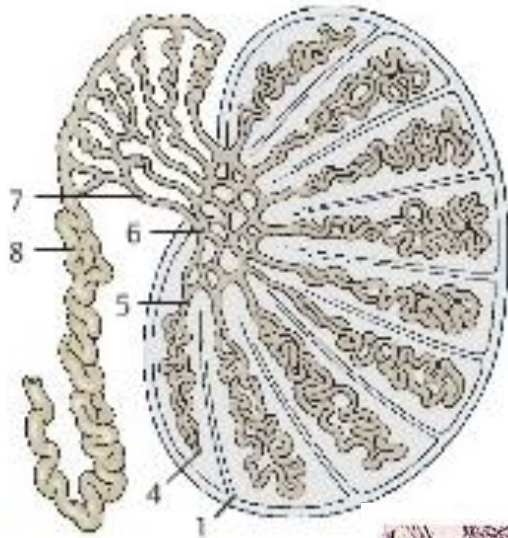
2) Intratesticularis ductusok

a) tubuli seminiferi recti

b) rete testis Halleri - **a mediastinum testisben**



Testis – tubularis rendszer



1) (S) – Tubuli seminiferi contorti

(spermato - and spermiogenesis)

- Germinalis epithelium

2) Intratesticularis ductusok

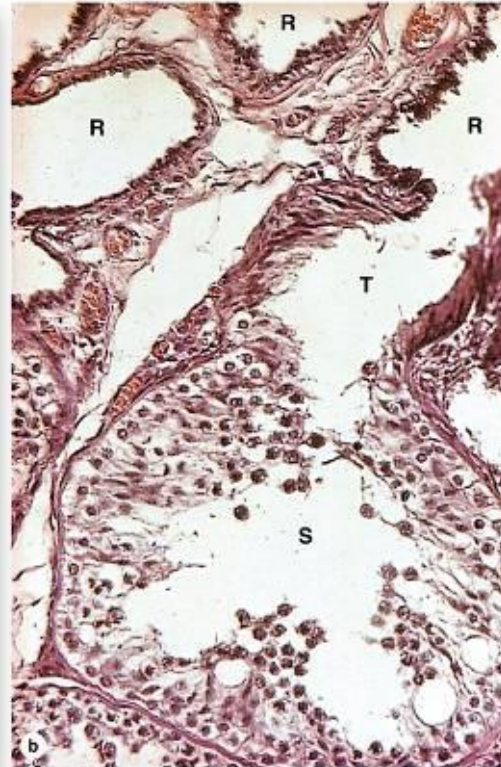
a) (T)- tubuli seminiferi recti

- egyrétegű Sertoli sejt sor

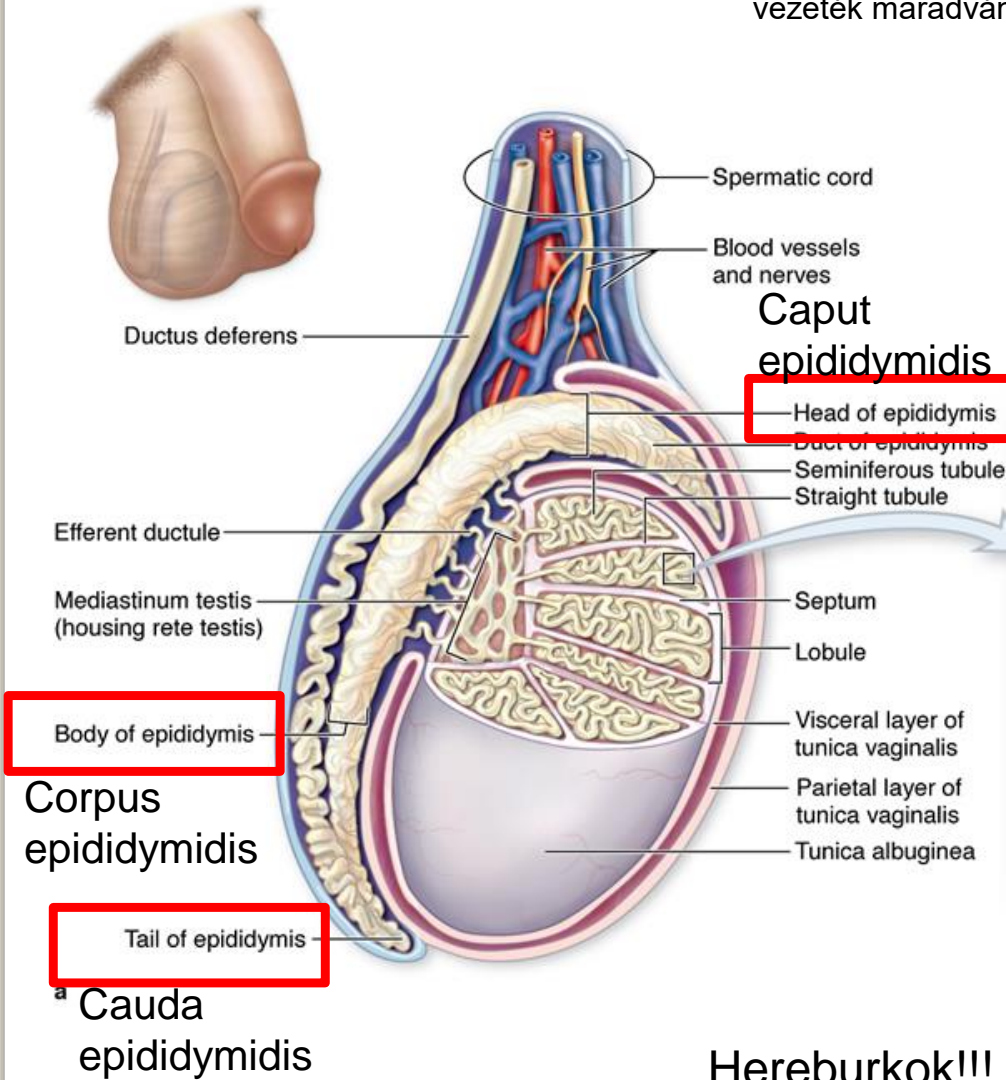
b) (R) - rete testis Halleri – a (M)

mediastinum testisben

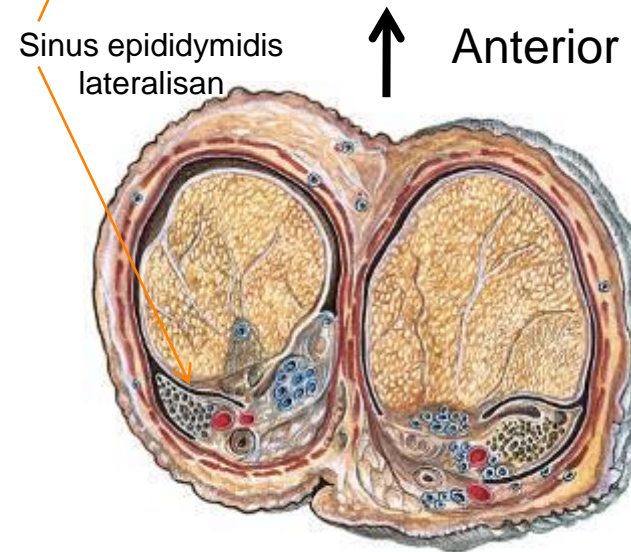
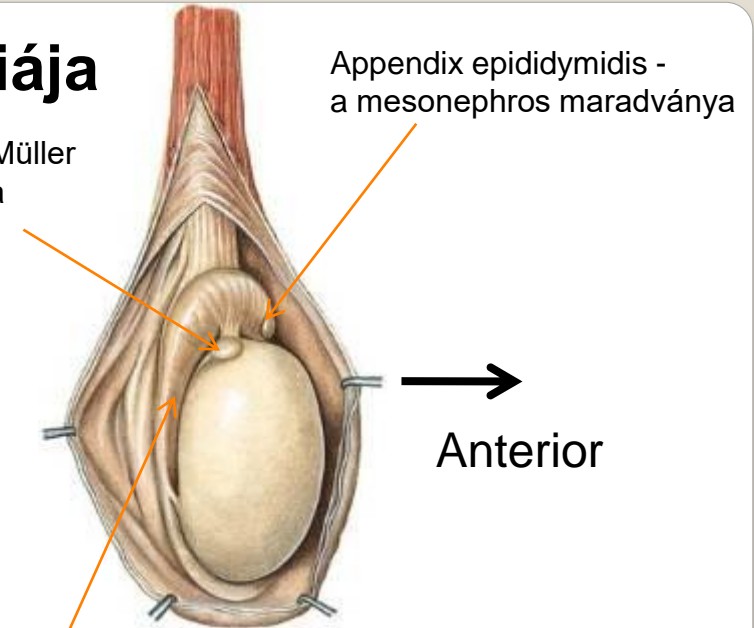
- egyrétegű köbhám



Epididymis (mellékhere)- anatómiája

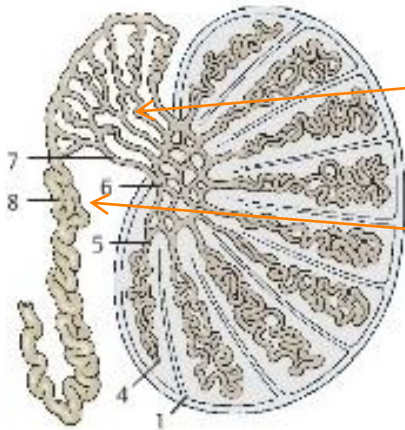


Appendix testis – a Müller vezeték maradványa



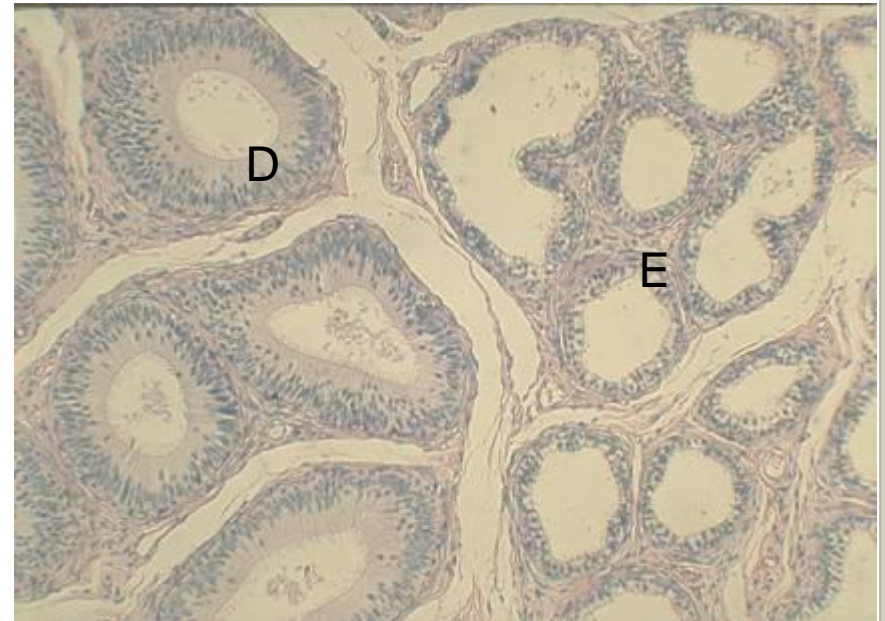
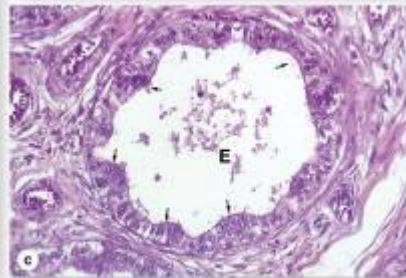
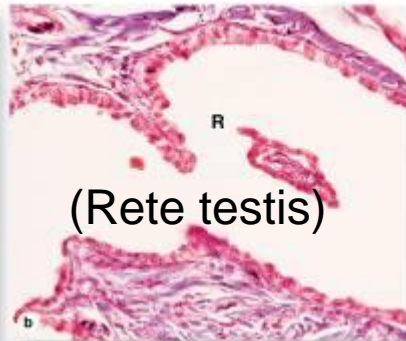
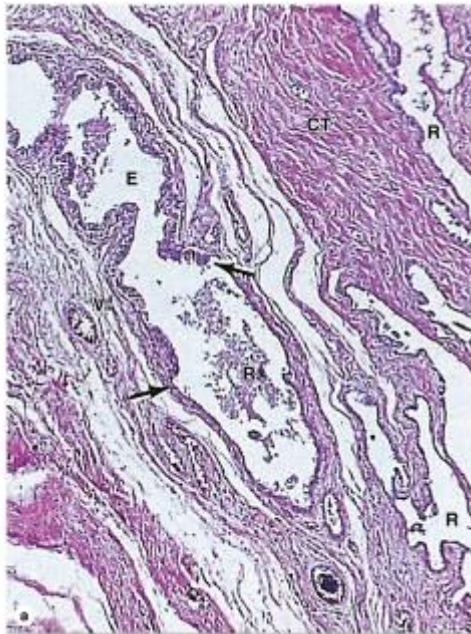
Hereburkok!!!

Epididymis – mikroszkópos kitekintés



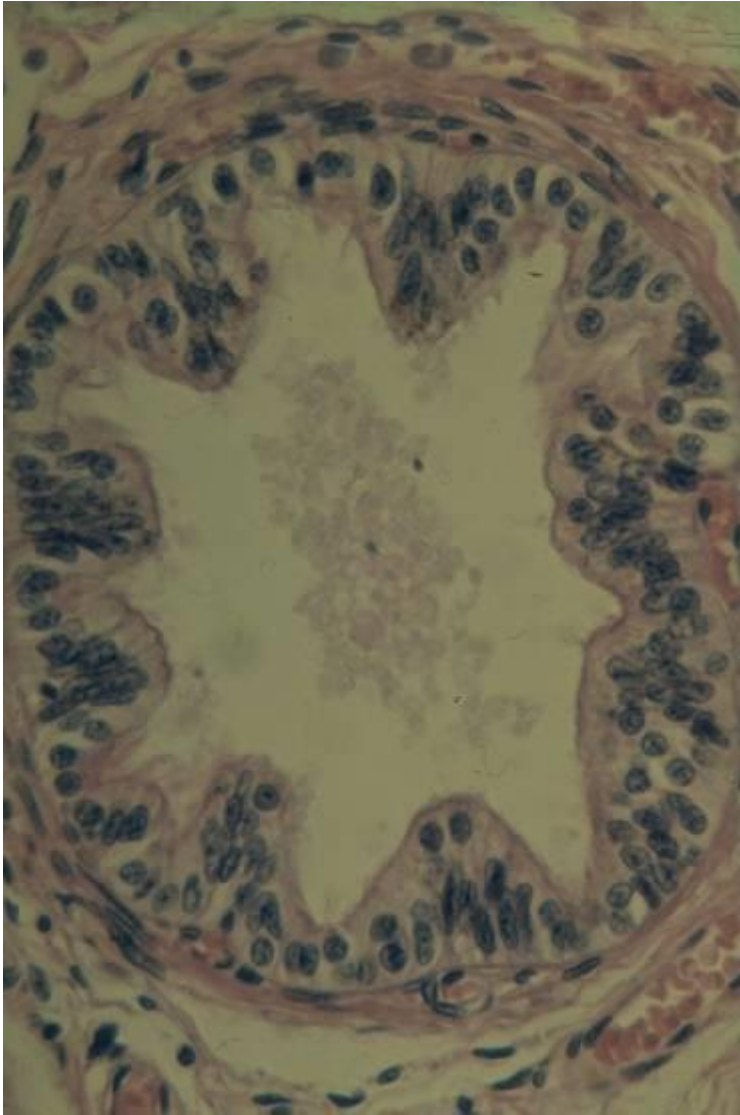
1) **(E) Ductuli efferentes testis** (száma: 12-20)
(hossz 20 cm 2cm hosszban feltekeredve)
- többmagsoros hám változatos sejtmagasság
= csillag alakú lumen

2) **(D) Ductus epididymidis (száma: 1)**
(hossz 4-5 m)
- kétmagsoros stereociliás hengerhám (irregularis
microvillusok)

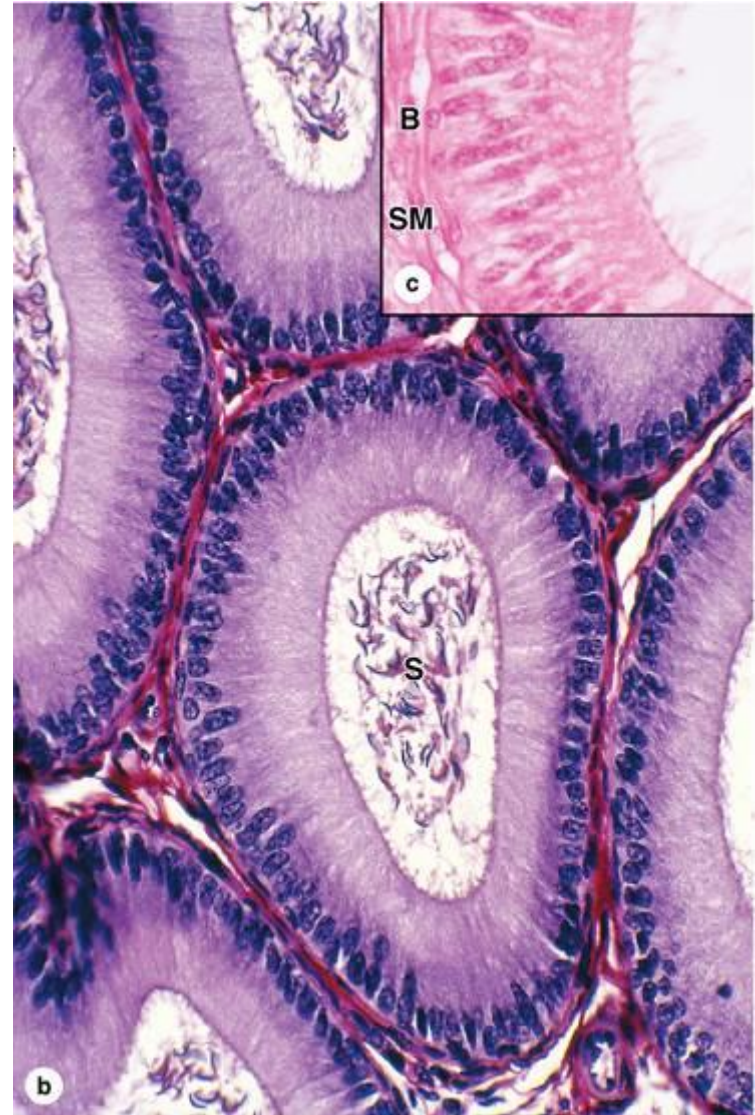


Epididymis – mikroszkópos kitekintés

Ductuli efferentes testis

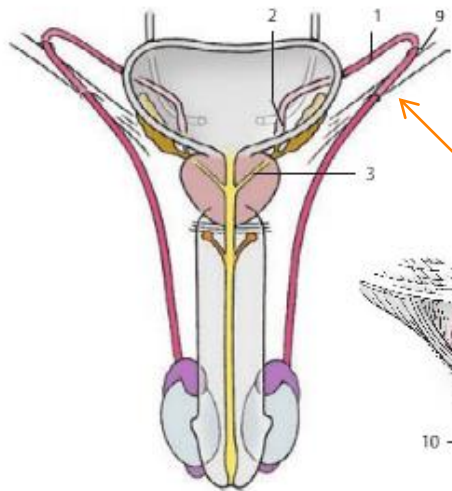


Ductus epididymidis

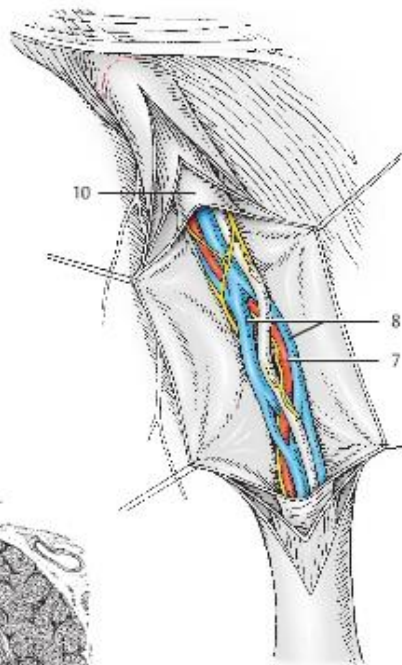


Ductus deferens (vas deferens) - ondóvezeték

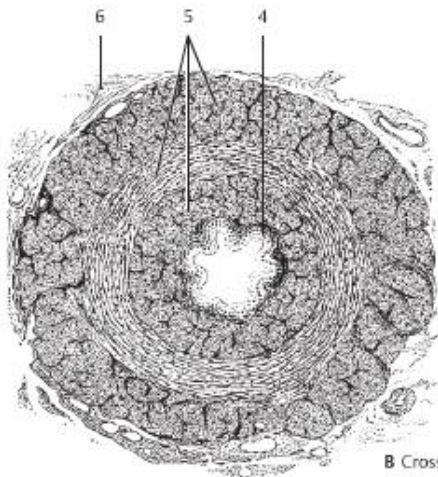
- 30-45 cm hosszú
- 3-3,5 mm vastag



A Seminal ducts, anterior aspect

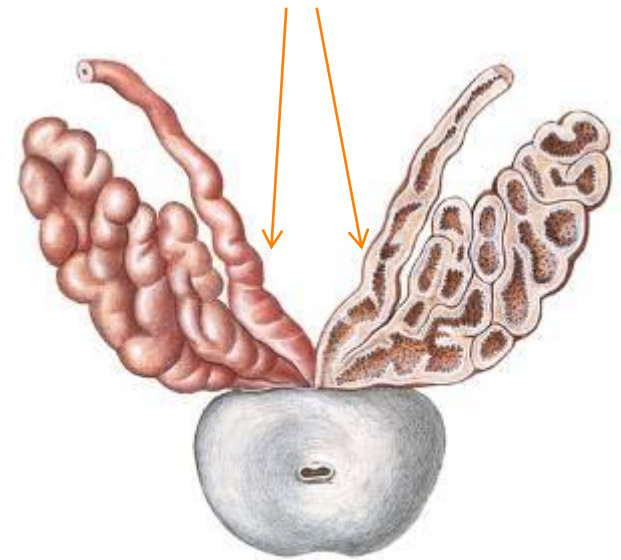


C Spermatic cord



B Cross-section through ductus deferens

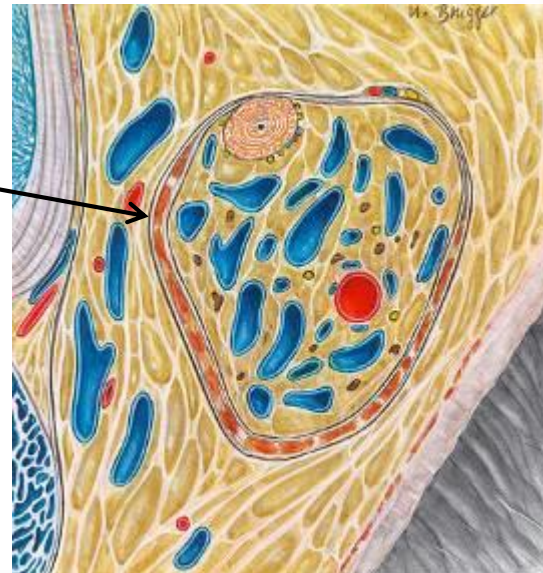
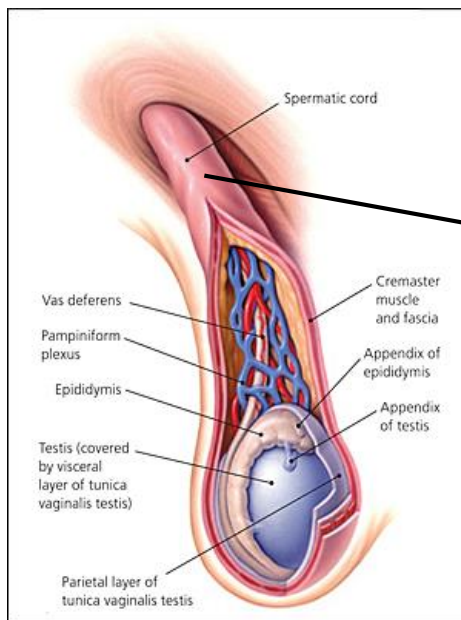
Ampulla ductus def.



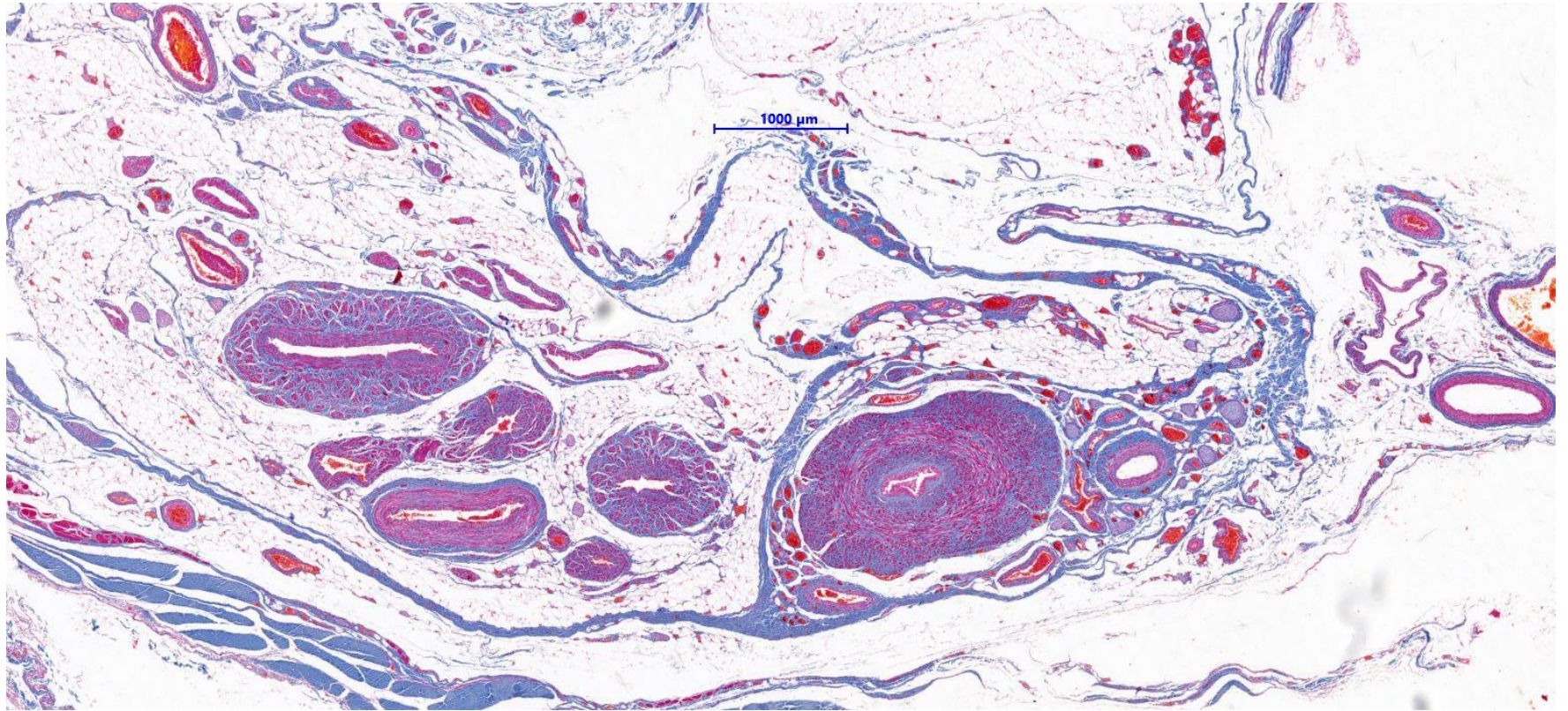
Az ureterrel való kereszteződése!!!

Funiculus spermaticus (ondózsínór)

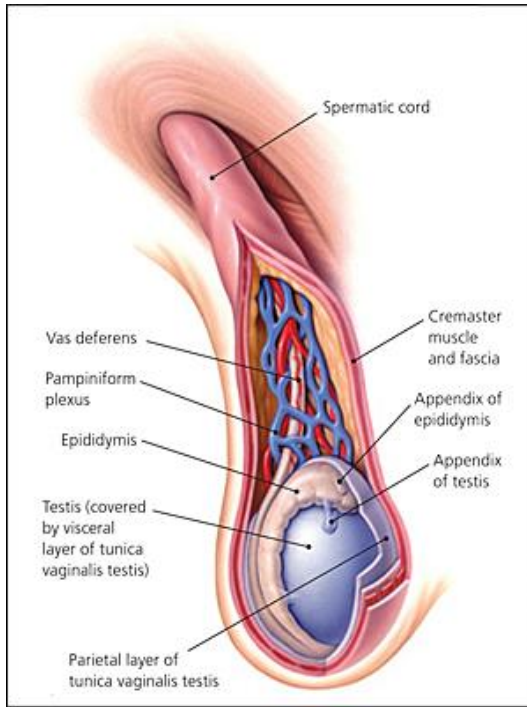
- Ductus deferens
- a. testicularis
- Plexus pampiniformis (testicularis véna)
- a. ductus deferentis
- Vegetativ idegek
- ramus genitalis nervus genitofemoralis



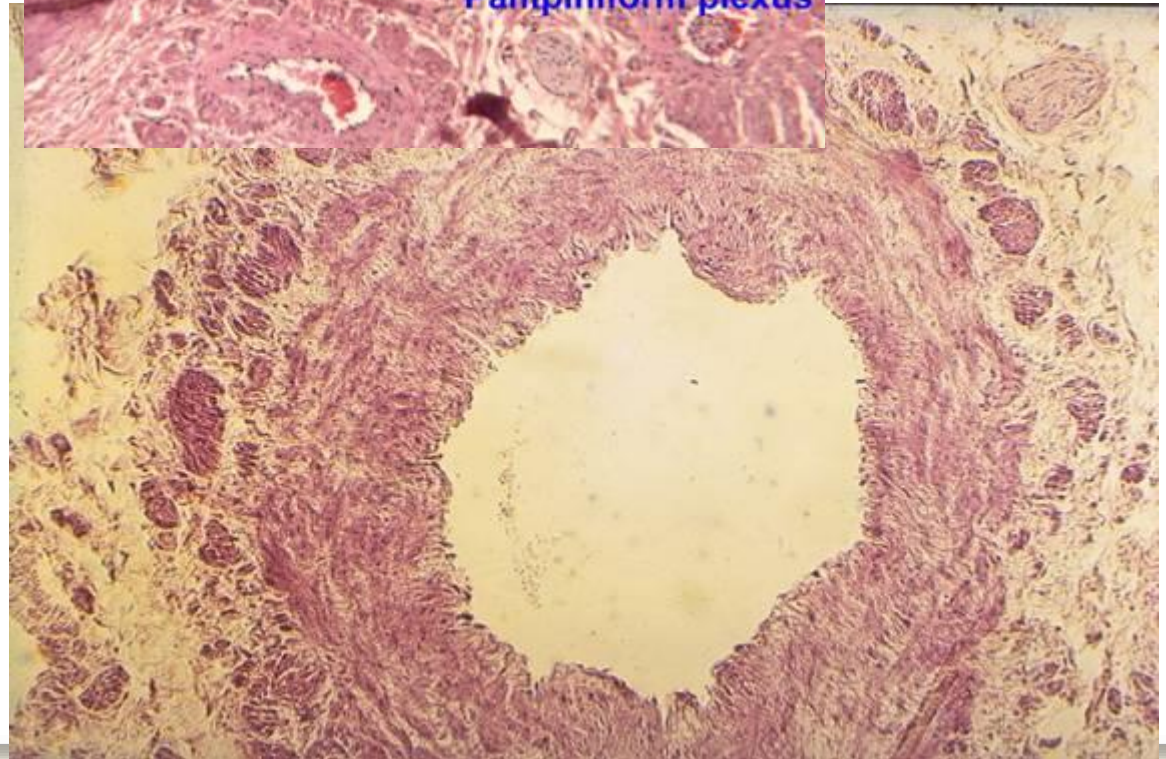
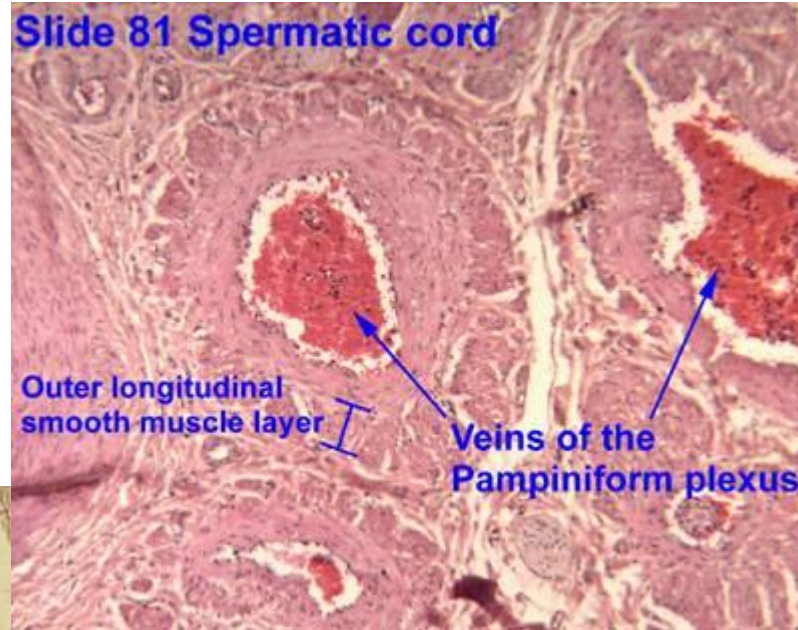
Funiculus spermaticus (ondózsínór)



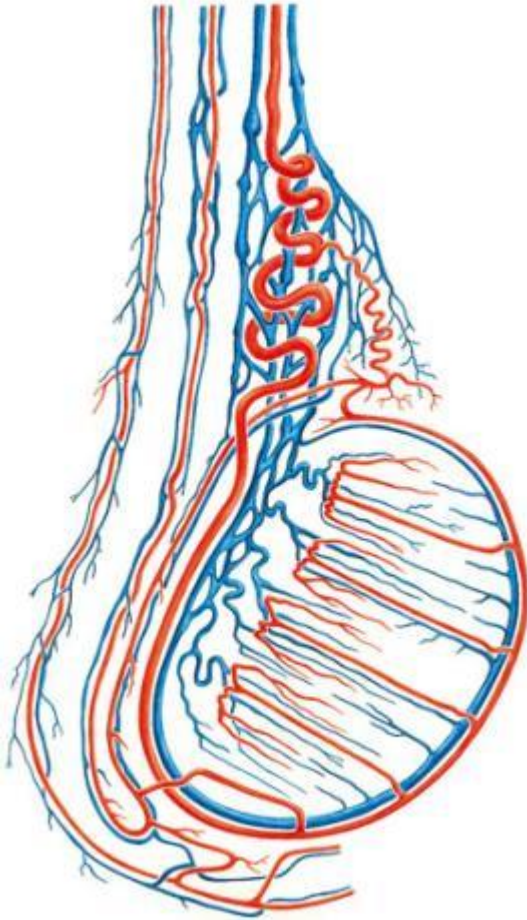
Plexus pampiniformis – muscularis véna



Slide 81 Spermatic cord



A here, mellékhere és az ondóvezeték vérellátása

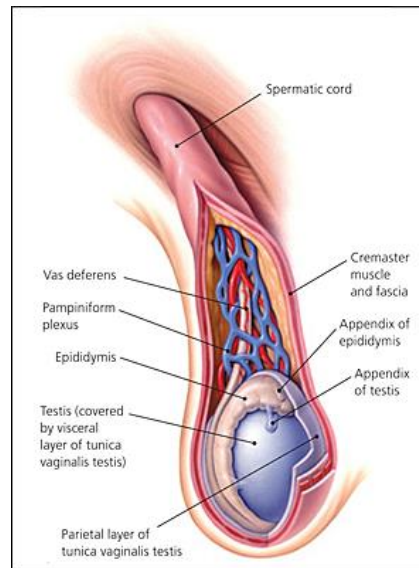


a. testicularis ← aorta abdominalis
a. ductus deferentis ← a. Iliaca interna

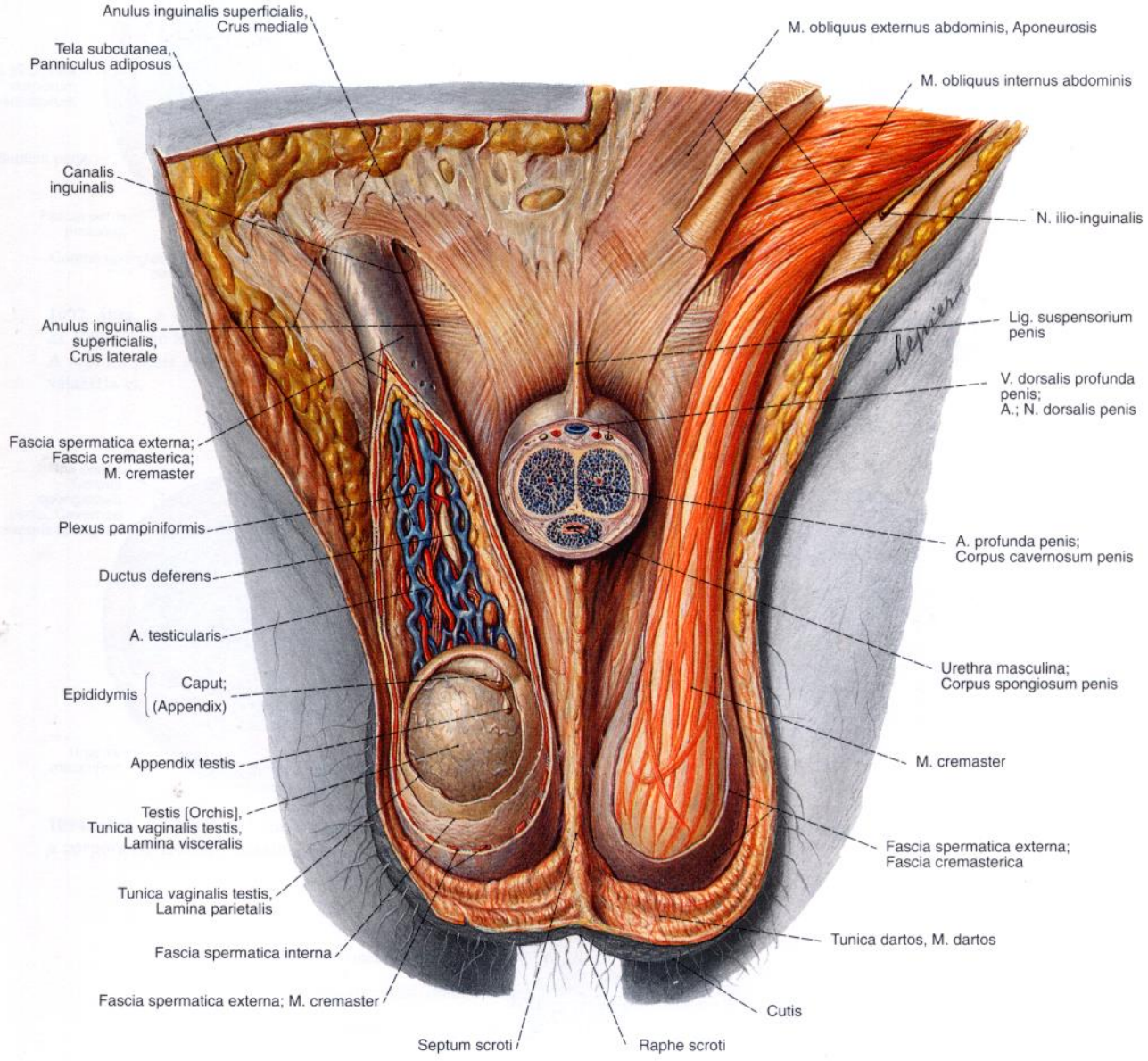
Plexus pampiniformis

→ **bal: vena renalis sinistra**

→ **jobb: vena cava inferior**



37 °C → 34 °C



Anulus inguinalis superficialis, Crus mediale

Tela subcutanea, Panniculus adiposus

Canalis inguinalis

Anulus inguinalis superficialis, Crus laterale

Fascia spermatica externa; Fascia cremasterica; M. cremaster

Plexus pampiniformis

Ductus deferens

A. testicularis

Epididymis (Caput; Appendix)

Appendix testis

Testis [Orchis], Tunica vaginalis testis, Lamina visceralis

Tunica vaginalis testis, Lamina parietalis

Fascia spermatica interna

Fascia spermatica externa; M. cremaster

Septum scroti

Raphe scroti

M. obliquus externus abdominis, Aponeurosis

M. obliquus internus abdominis

N. ilio-inguinalis

Lig. suspensorium penis

V. dorsalis profunda penis; A.; N. dorsalis penis

A. profunda penis; Corpus cavernosum penis

Urethra masculina; Corpus spongiosum penis

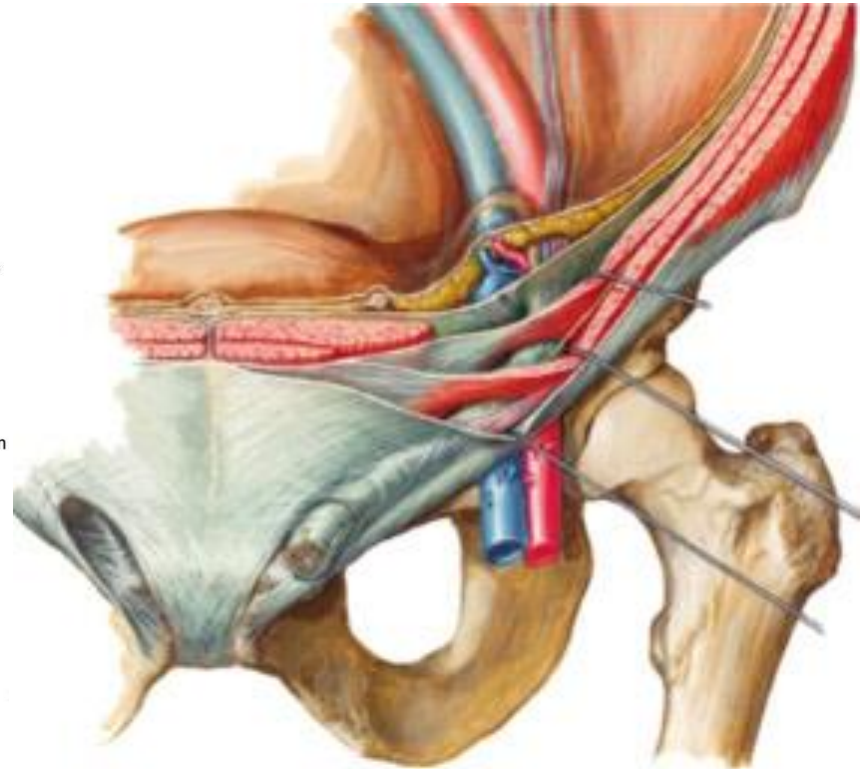
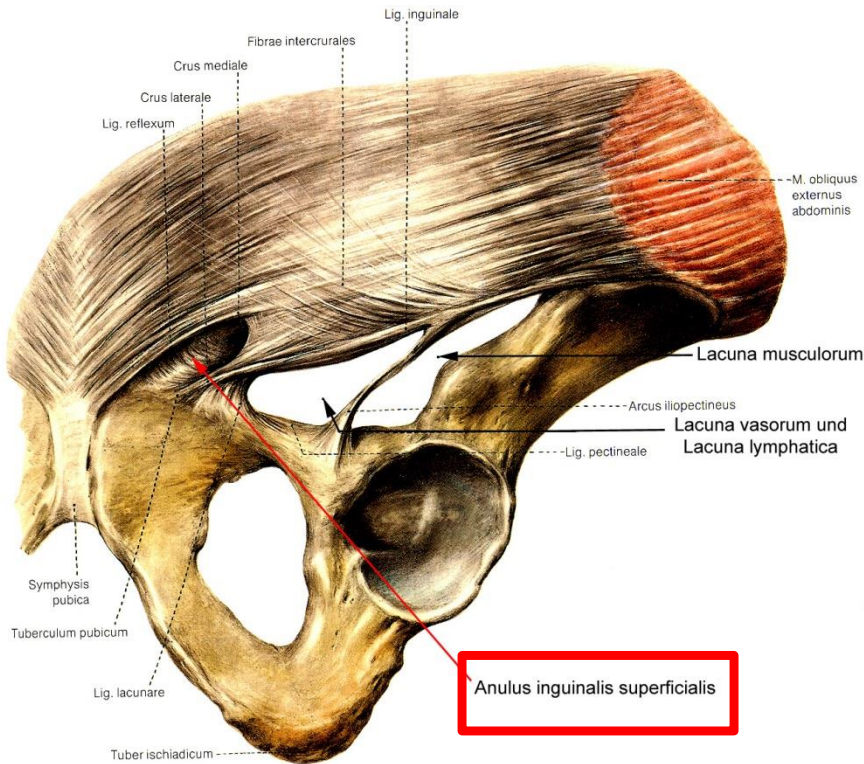
M. cremaster

Fascia spermatica externa; Fascia cremasterica

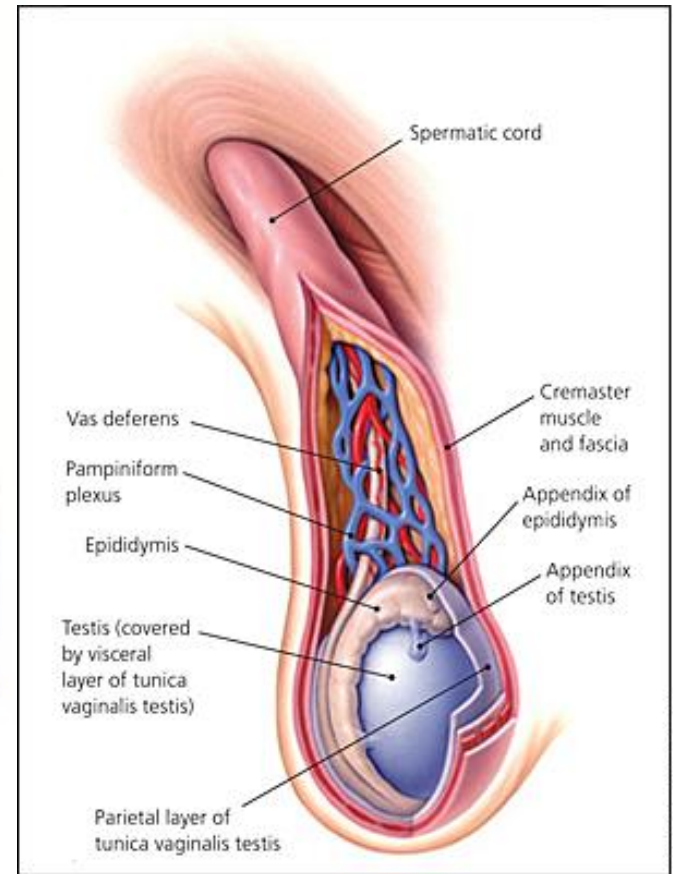
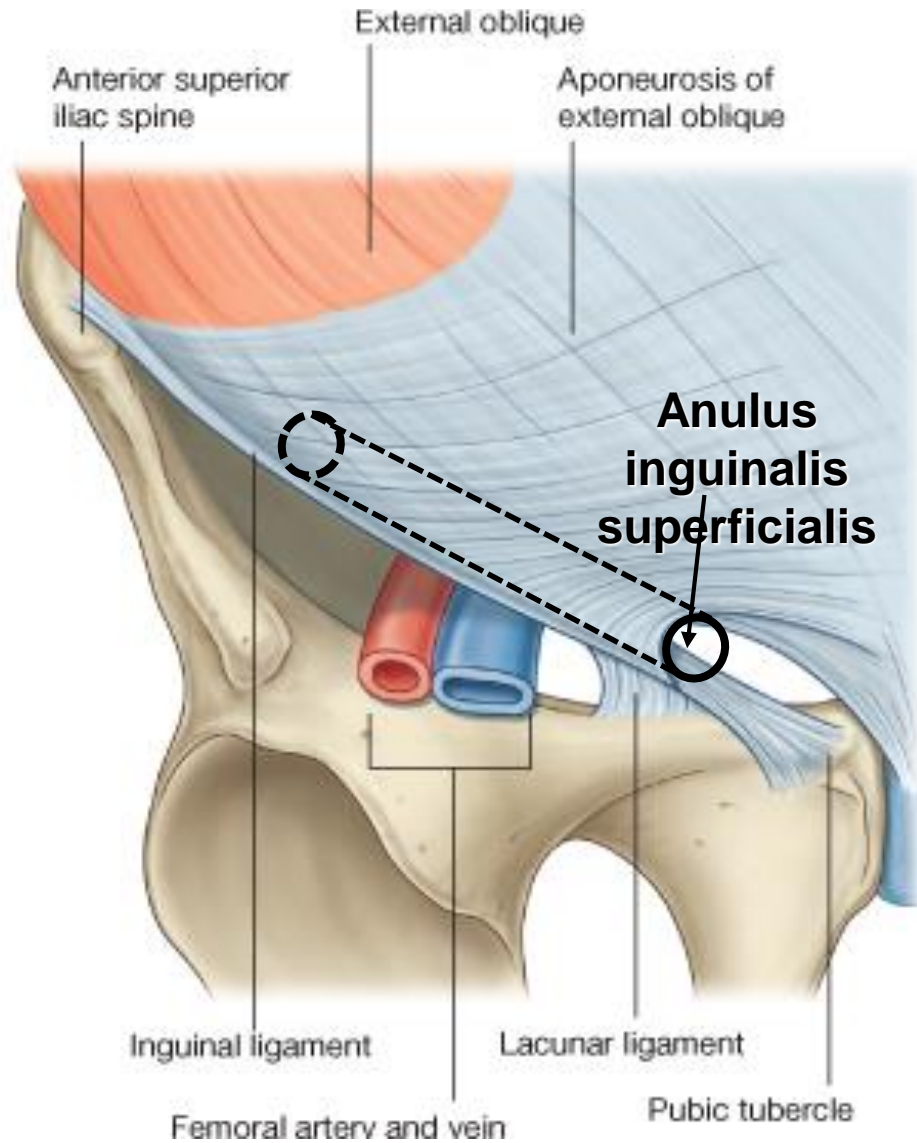
Tunica dartos, M. dartos

Cutis

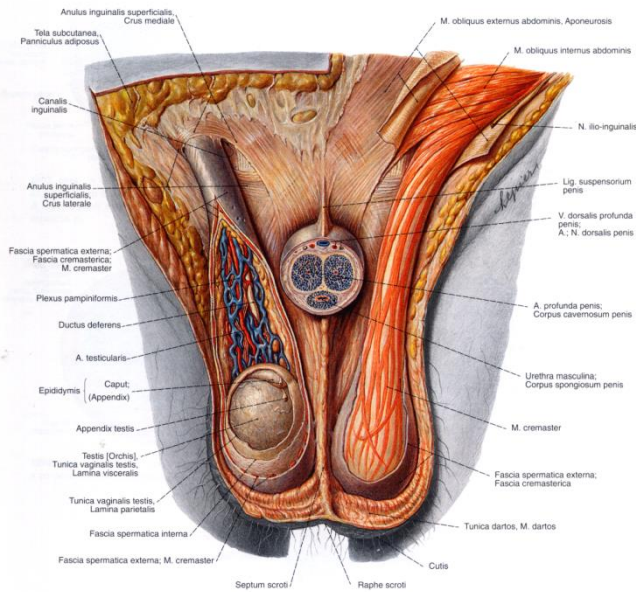
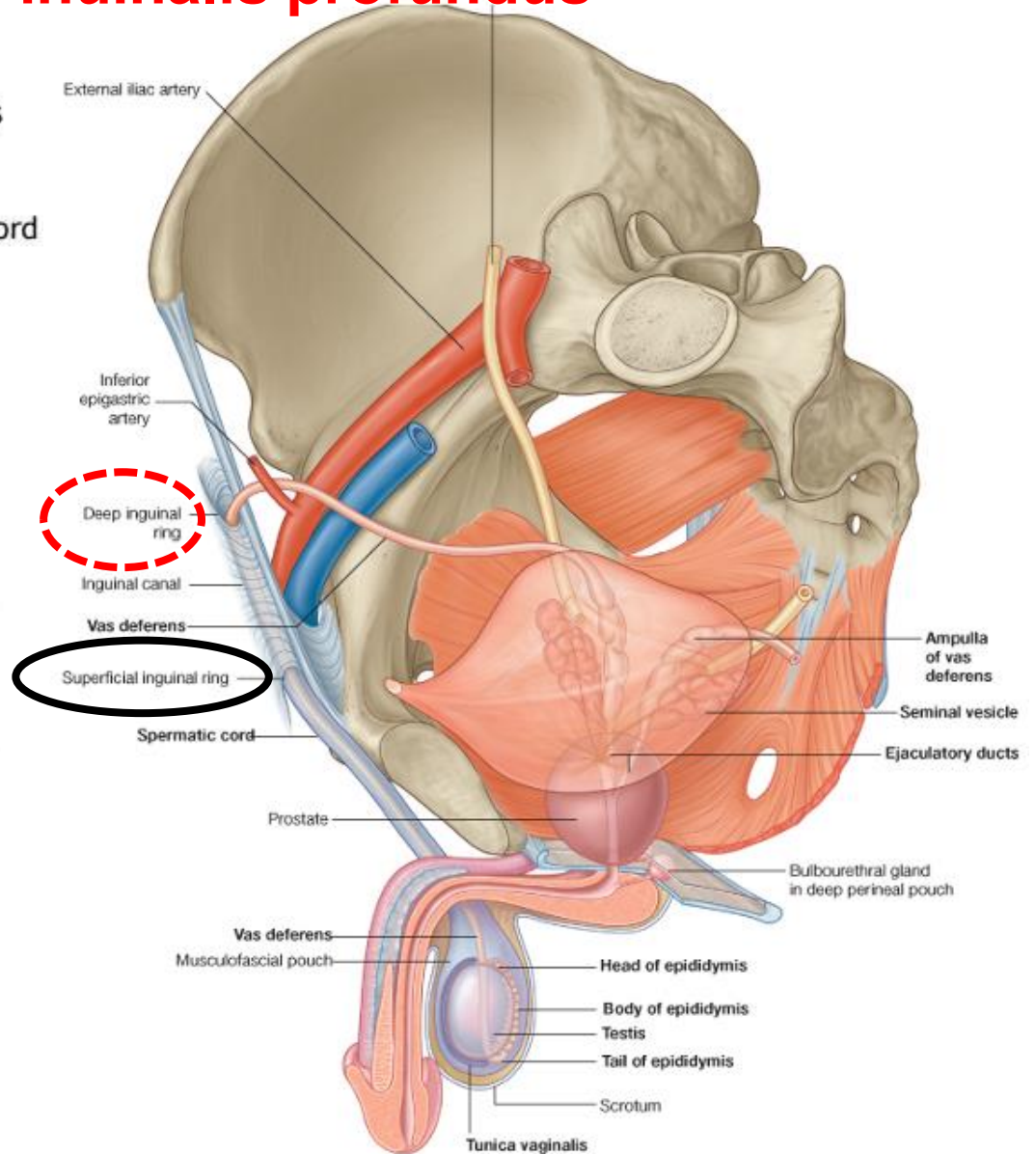
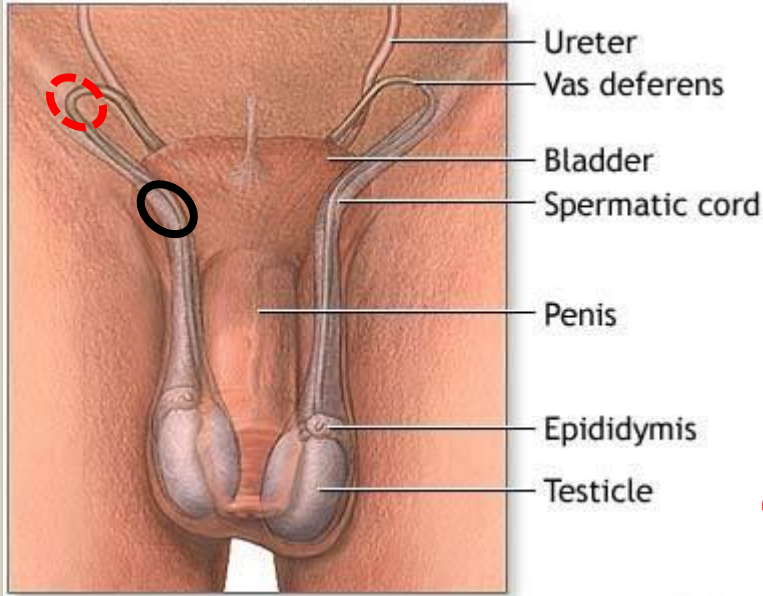
Canalis inguinalis ≠ hiatus subinguinalis



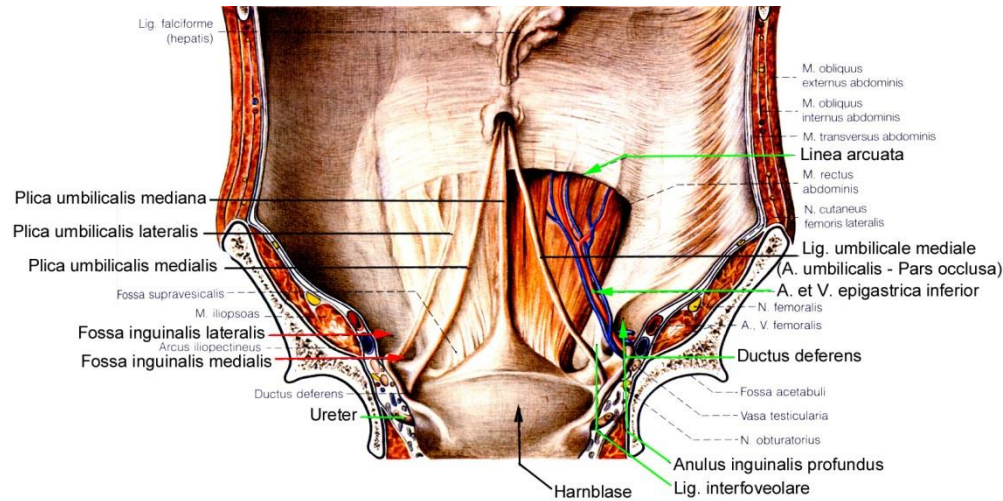
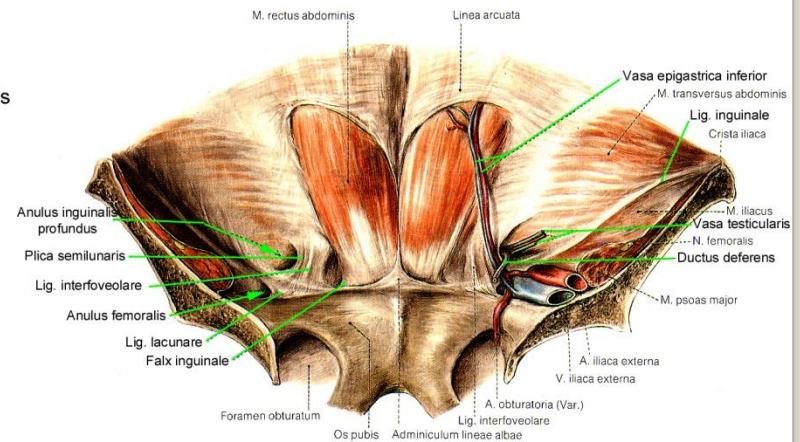
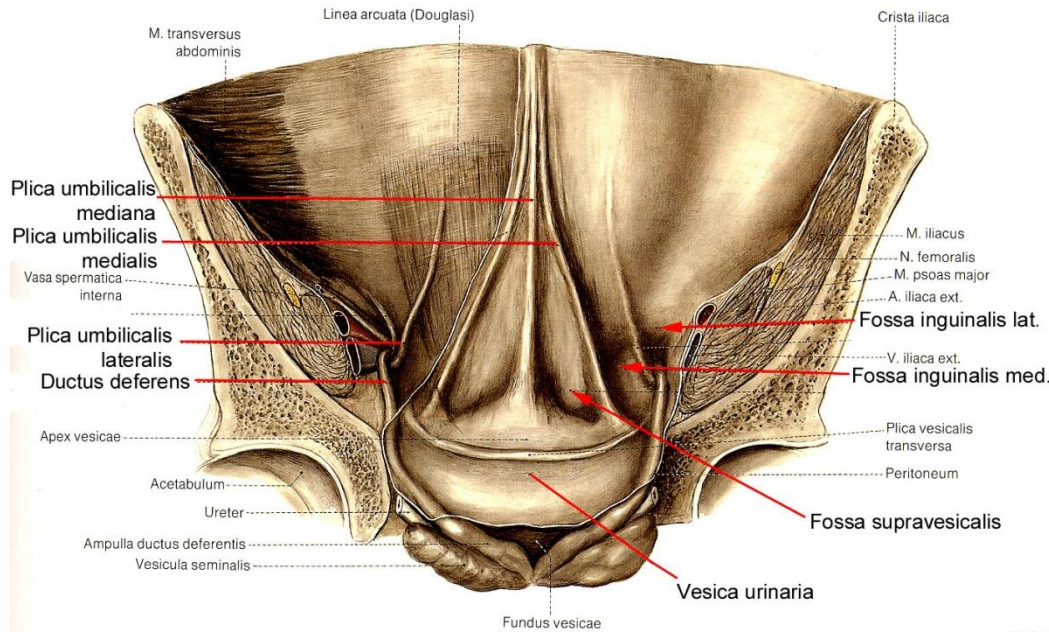
Canalis inguinalis (anulus inguinalis superficialis)



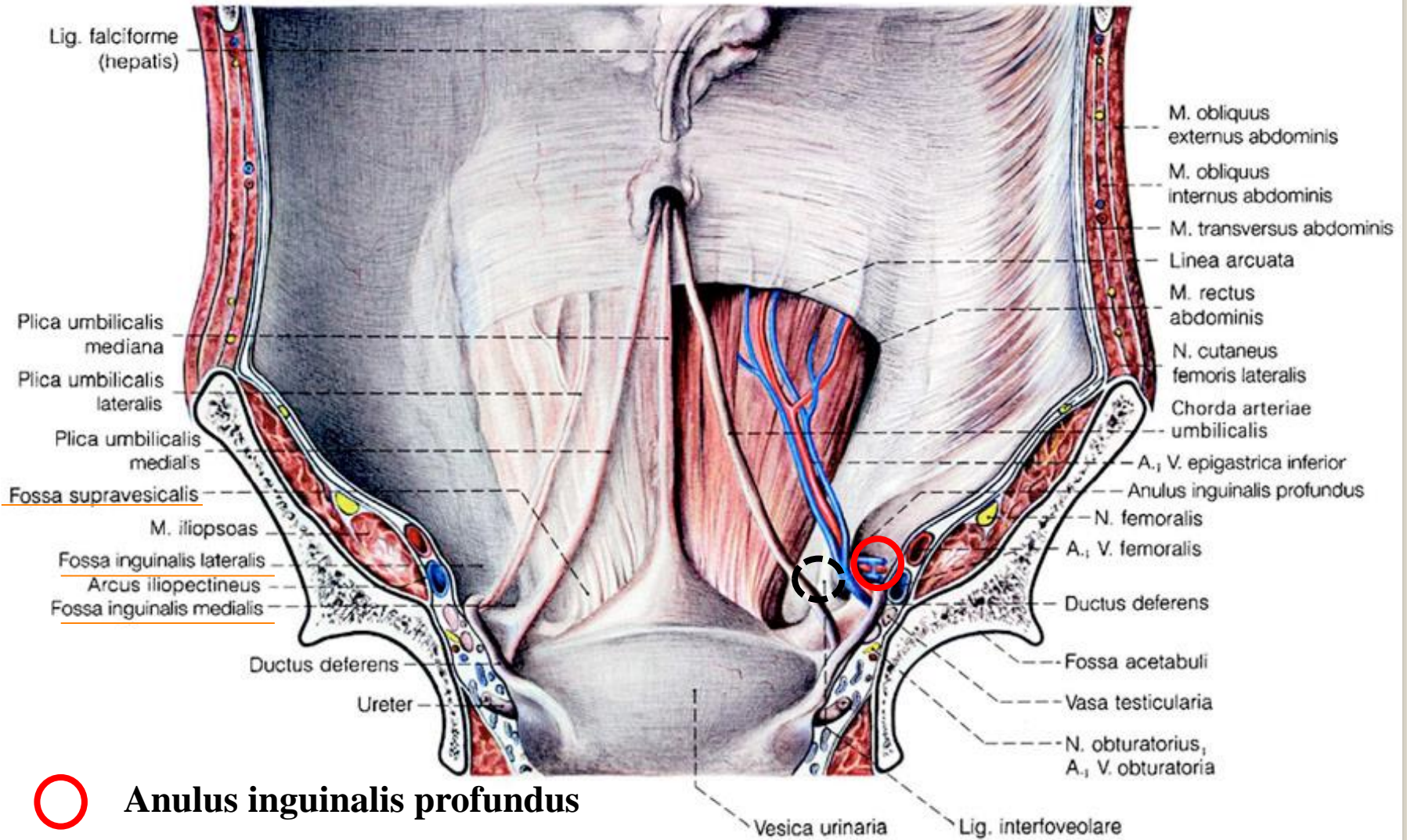
Anulus inuinalis profundus



A hasfal hasüreg felőli nézete (anulus inguinalis profundus)

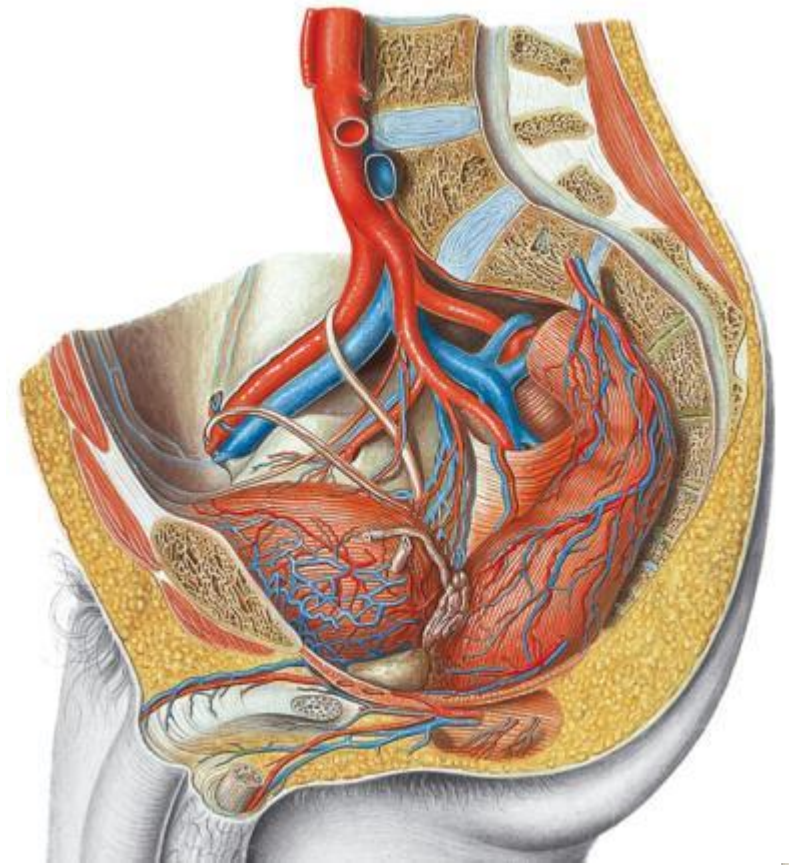
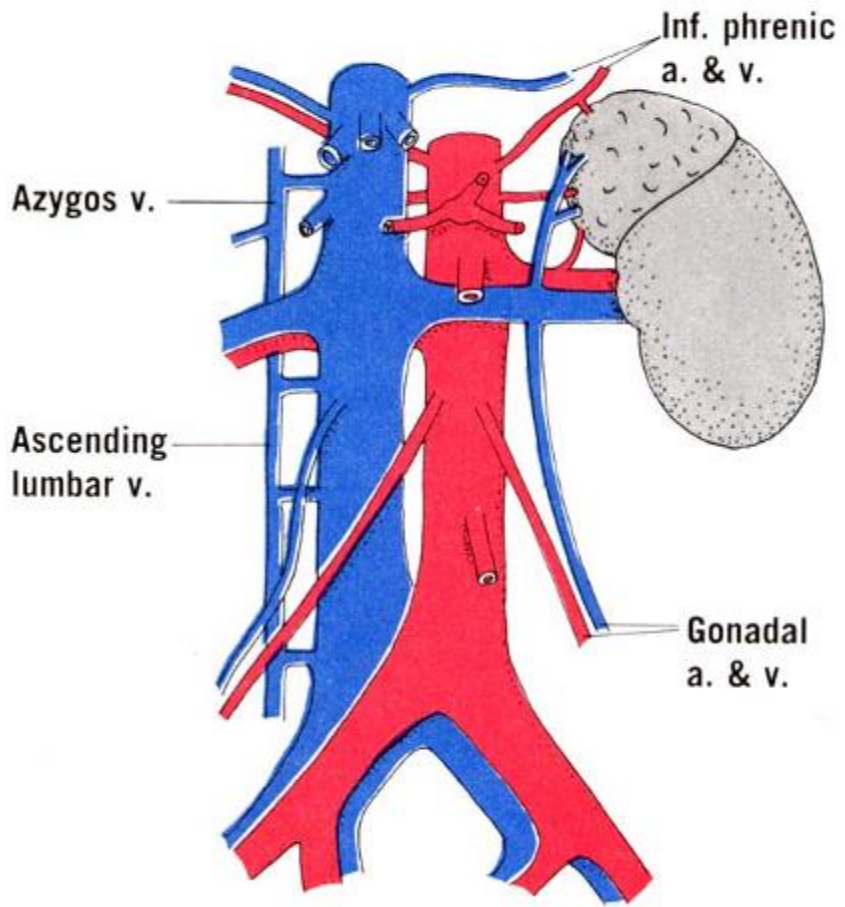


A hasfal hasüreg felőli nézete (anulus inguinalis profundus)



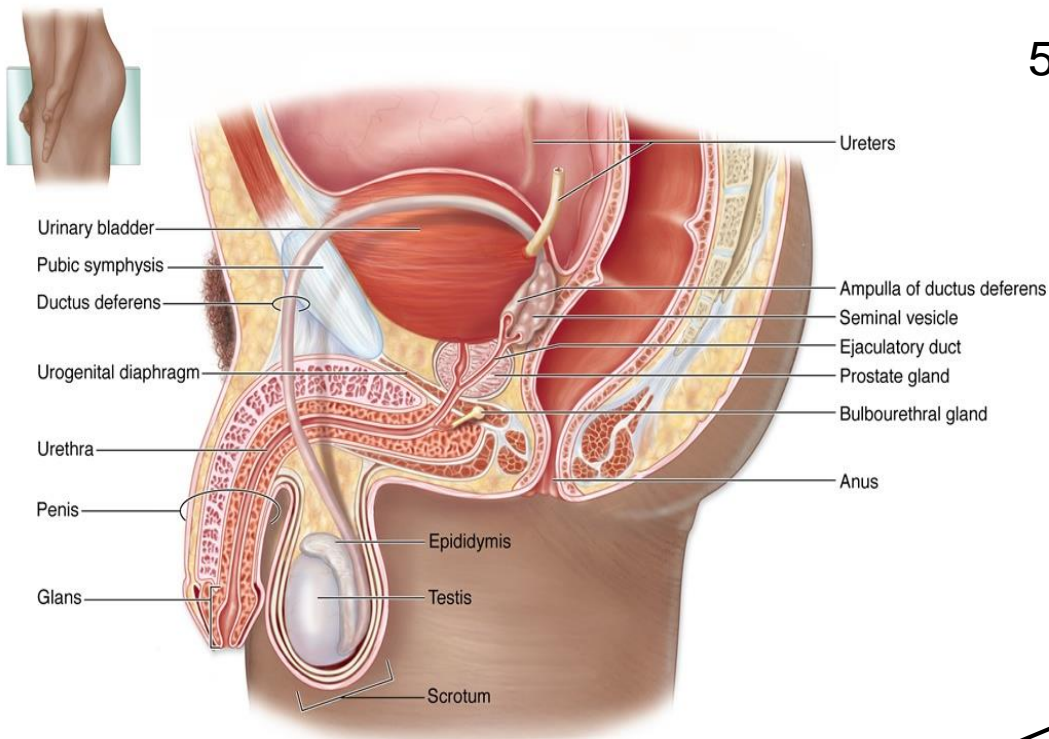
○ Anulus inguinalis profundus

⊖ Anulus inguinalis superficialis

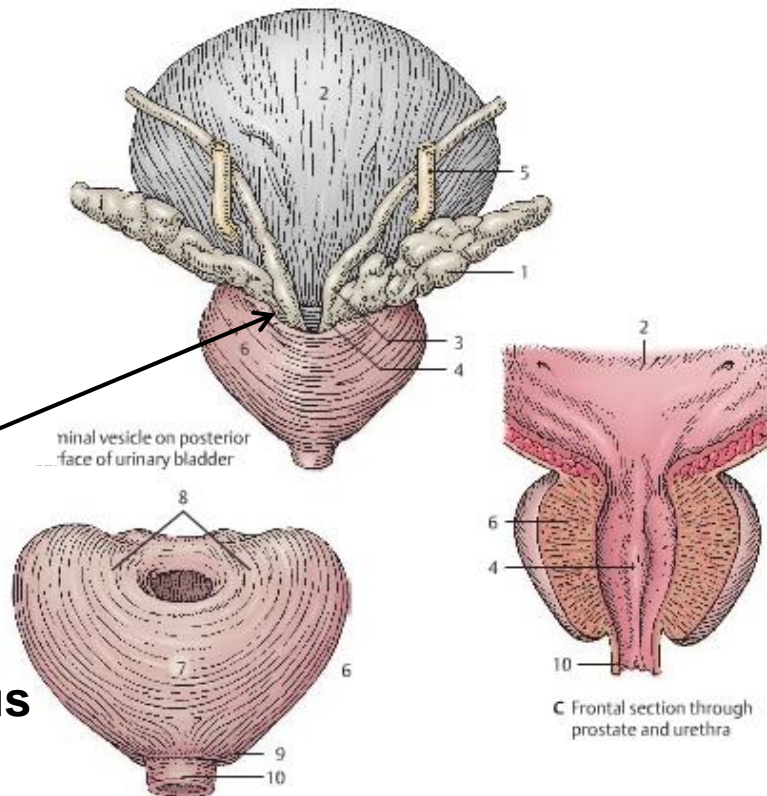


Vesicula seminalis (ondóhólyag) - anatómiája

5 cm-re feltekeredett 15cm cső



Páros szerv



Ductus excretorius!!!

+

= ductus ejaculatorius

ampulla ductus deferentis

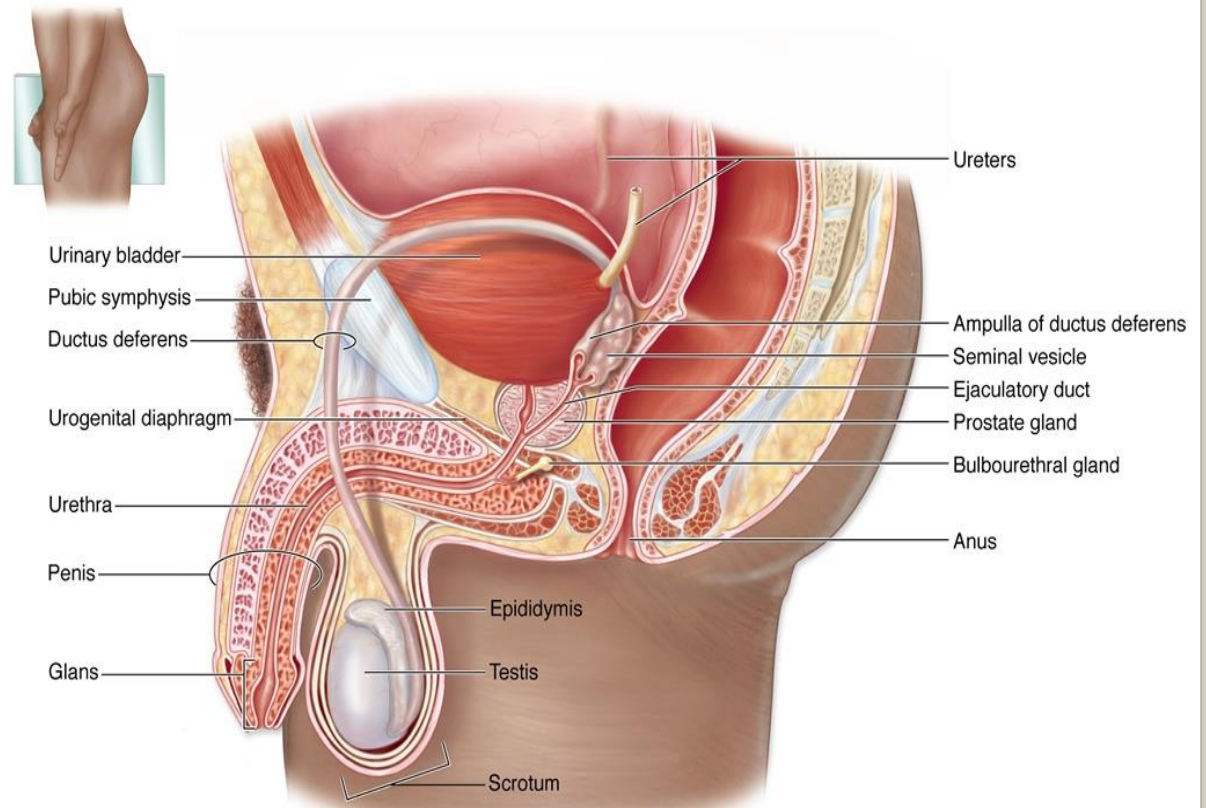
Vesicula seminalis - anatómiája

Vérellátása:

- Arteria vesicalis inferior
- a. ductus deferentis
- a. Rectalis media
- plexus prostaticus

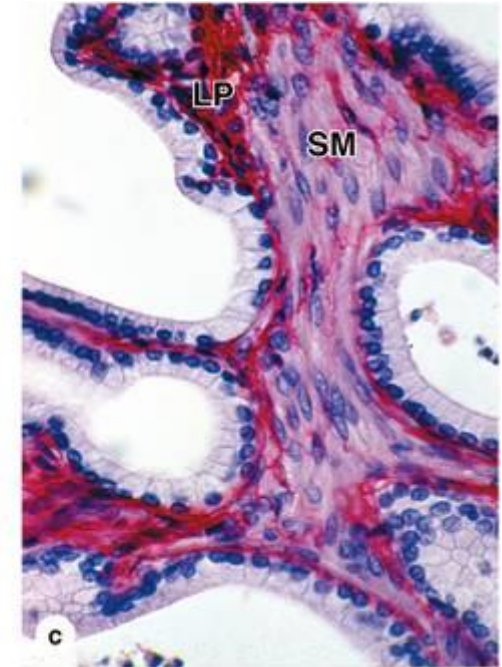
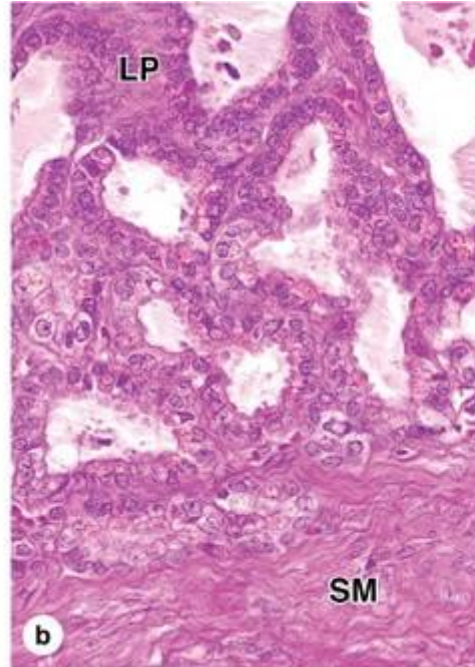
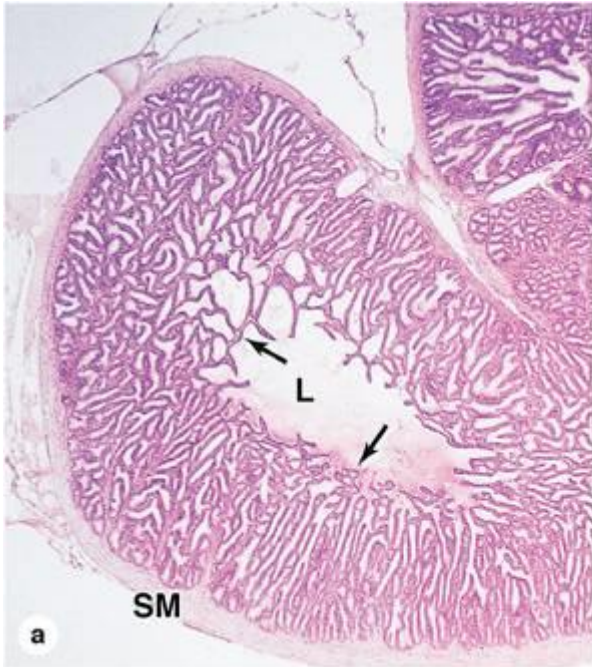
Peritonealis helyzete:

infraperitonealis szerv



Vesicula seminalis – szövettani kitekintő

Exocrine mirigy

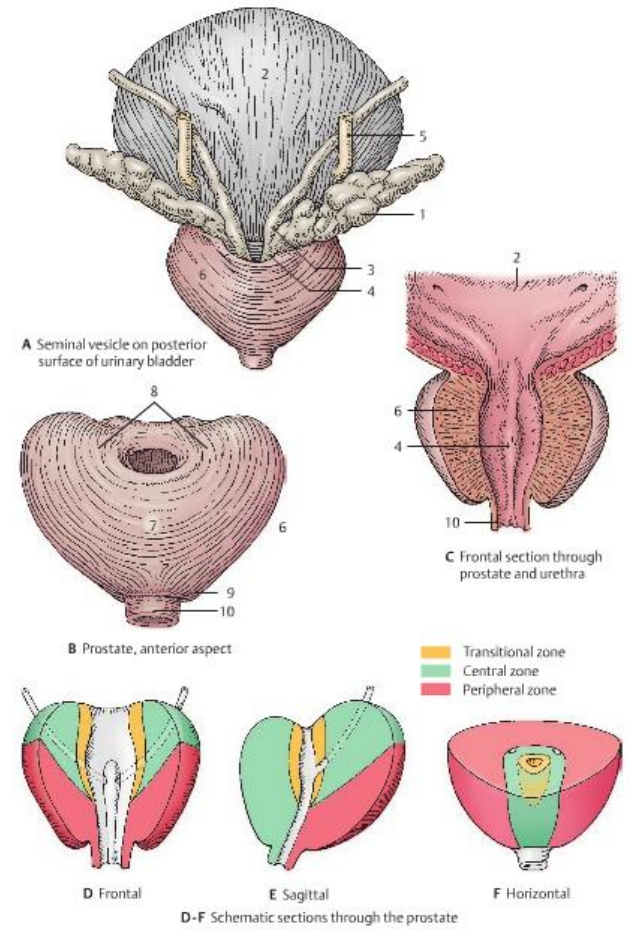
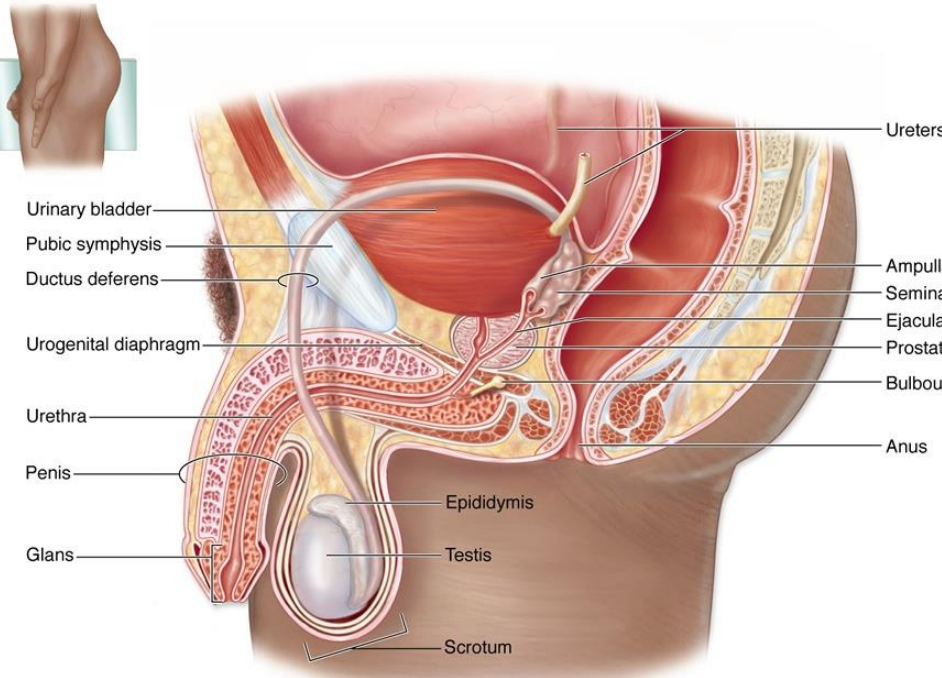


Egyrétegű vagy többmagsoros hengerhám, simaizom

Prostata- anatómiája



Szelídgesztenye alakú és méretű szerv
 -20 g
 -2cm x 3cm x 4 cm



Részei, felszínei:

- Facies anterior (pubis)
- Facies posterior (rectum!!!)
- Facies inferolateralis
- Basis (a húgyhólyag fundusa)
- Apex

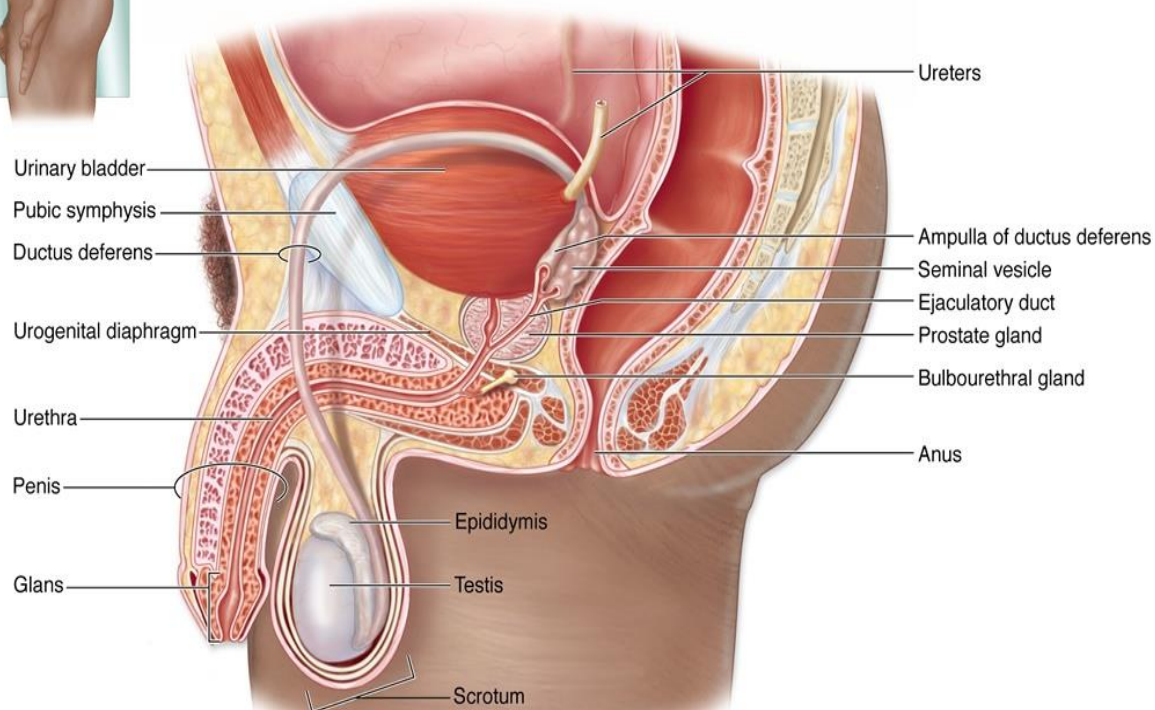
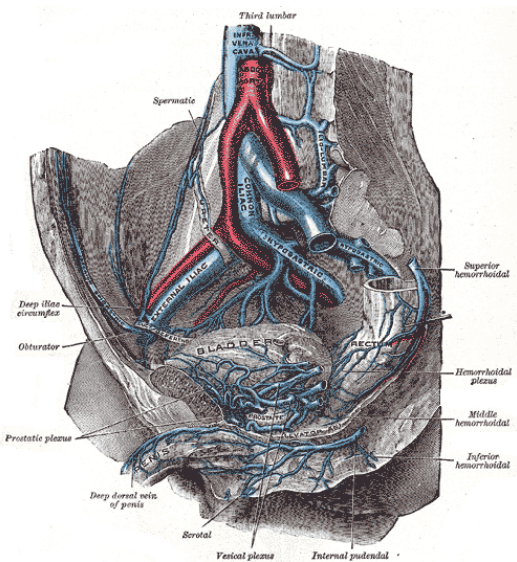
Prostata- anatómiája

Vérellátása:

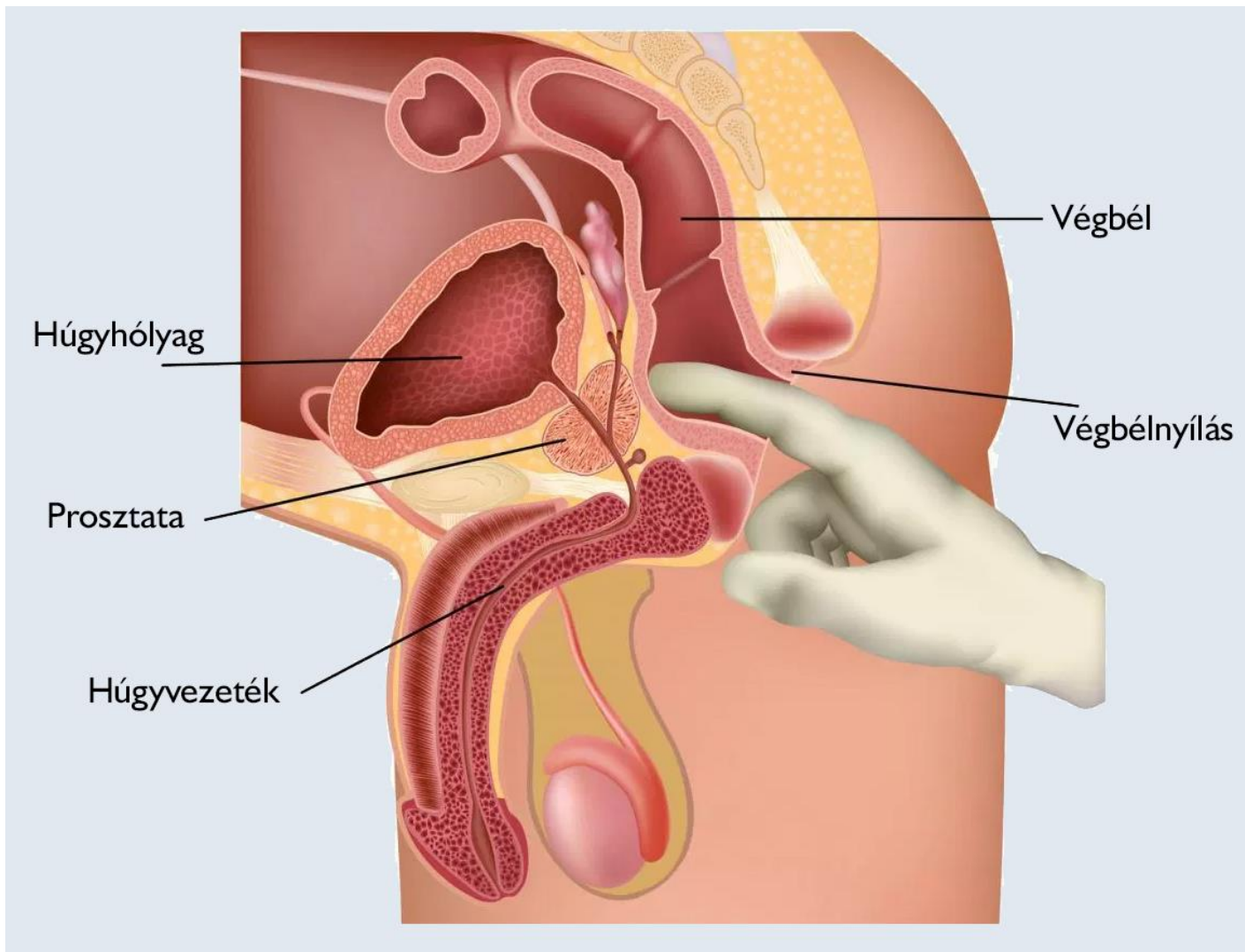
- A. Vesicalis inferior
- A. Pudenda interna
- A. Rectalis media

- plexus prostaticus
(vena iliaca interna;
plexus vesicalis;
Plexus vertebralis internus
et externus!!!)

Peritonealis helyzete: infraperitonealis szerv

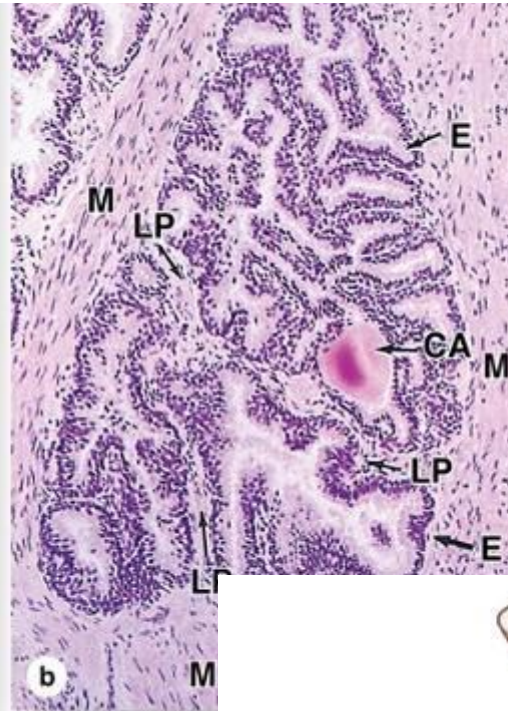
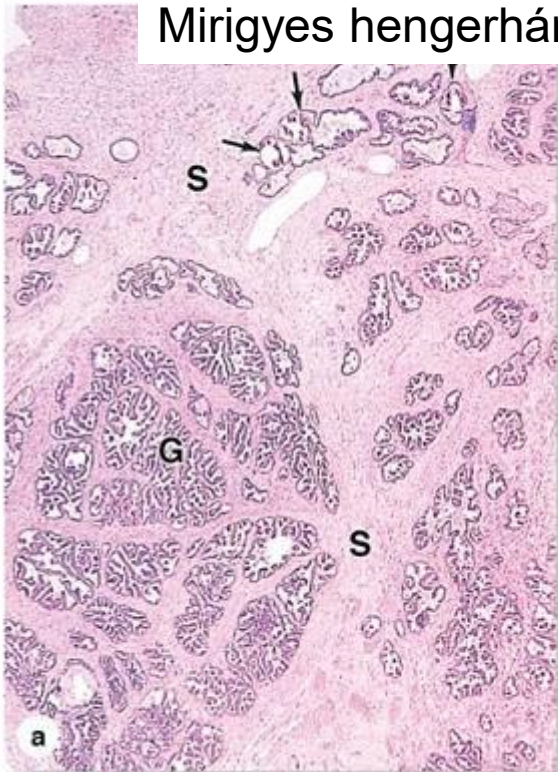


Prostata rectumhoz viszonyított helyzete



Prostata- szövettani kitekintő

Mirigyes hengerhám + simaizom + corpora amylacea

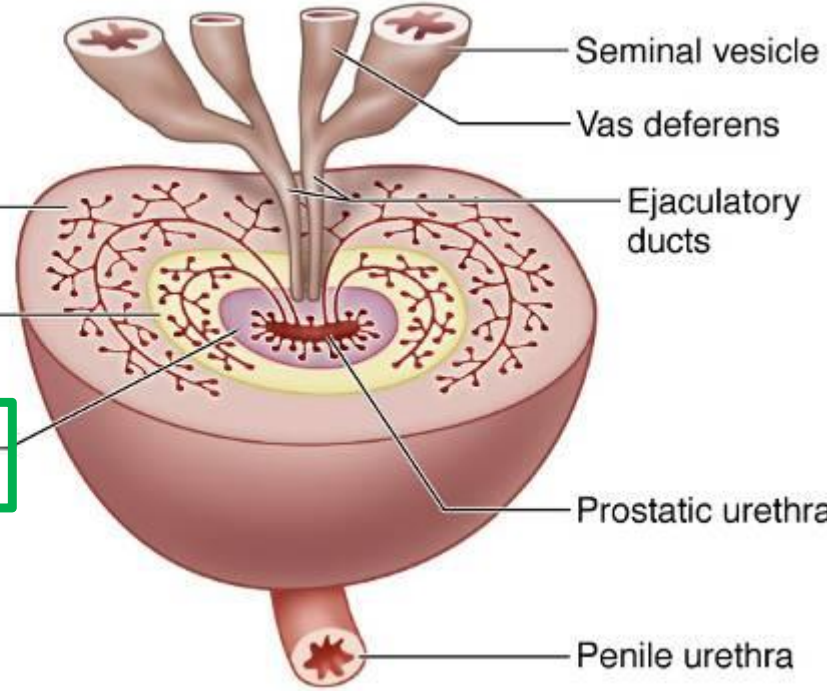


- Mucosalis mirigyek
- Submucosalis mirigyek
- Fő mirigyek

Peripheral zone

Central zone

Transitional zone



Funkciók

Testis:

Spermiumok termelése
74 nap

Epididymis:

-Érési folyamat
-Raktározási hely (8-17 nap)

Ductus deferens:

-A spermiumok továbbítása
-(perisztaltikus hullámok)

Vesicula seminalis:

-Alkalikus szekrétum (fruktózban gazdag)
-Citrát
-Inozitol
-Prosztaglandinok
-Fibrinogen
-Enzimek

Prostata:

-Savas szekrétum
- Enzimek

Semen = spermiumok + a genitalis mirigyek szekrétuma

Köszömöm megtisztelő figyelmüket!!!

