

Mellékhere, funiculus spermaticus, vesicula seminalis és prostata anatómiája

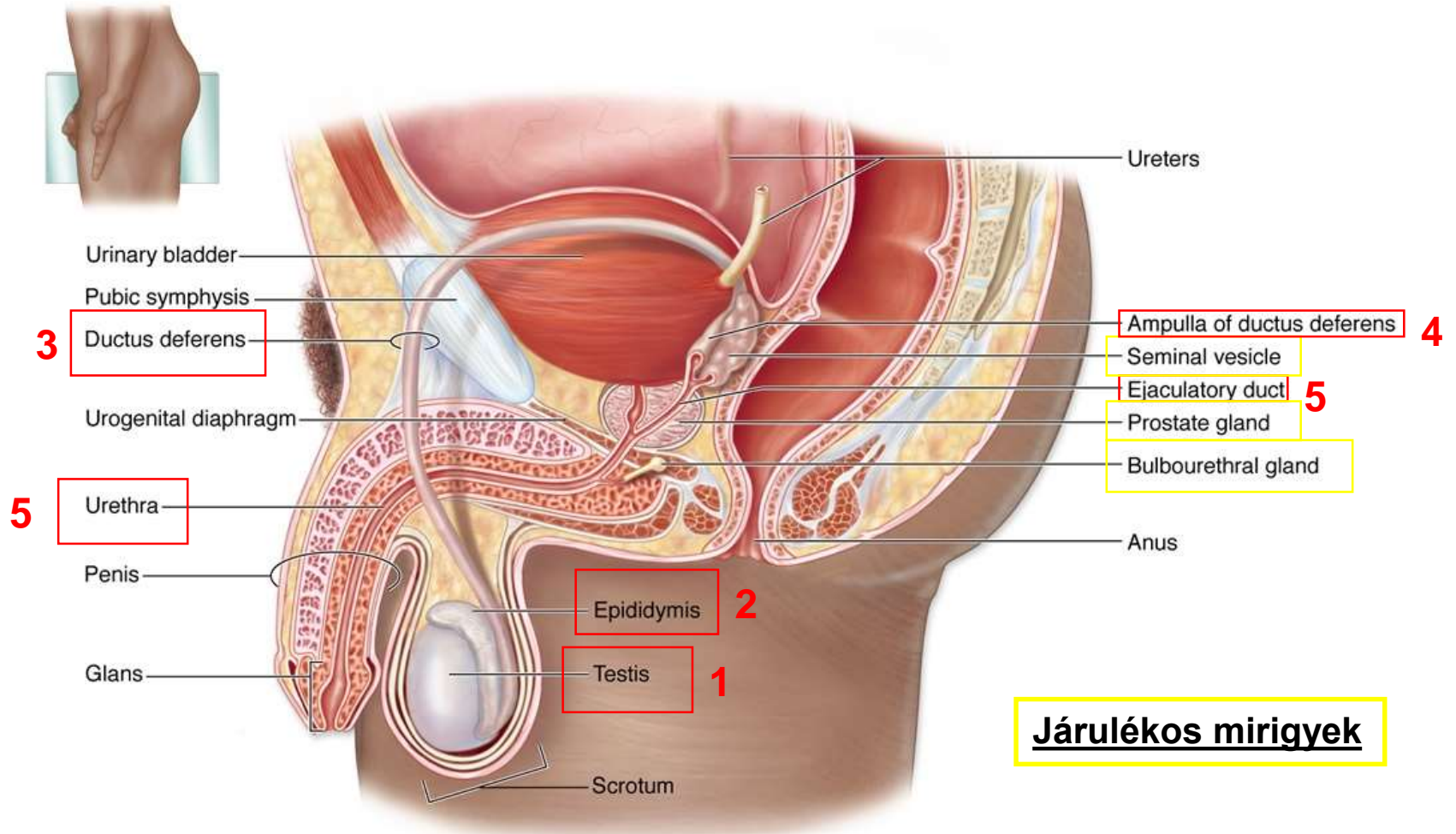
Dr. Vereczki Viktória

Semmelweis Egyetem,

Anatómiai, Szövet- és Fejlődéstani Intézet

2020. március 13. on-line

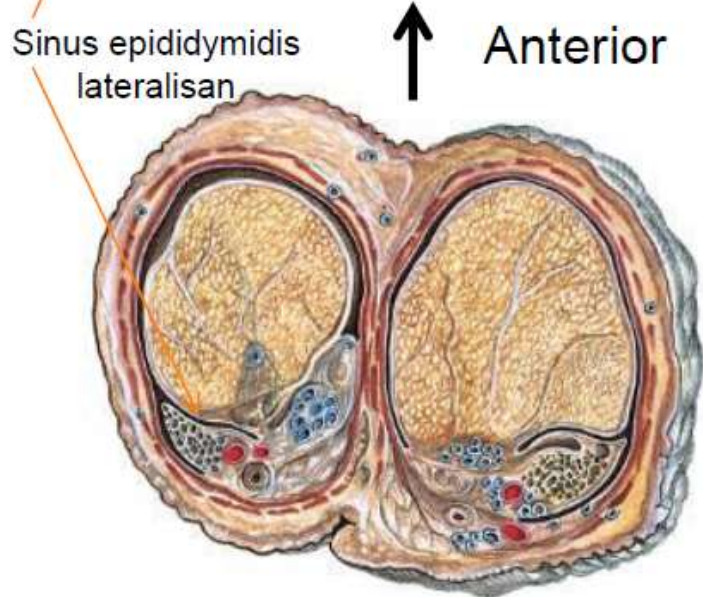
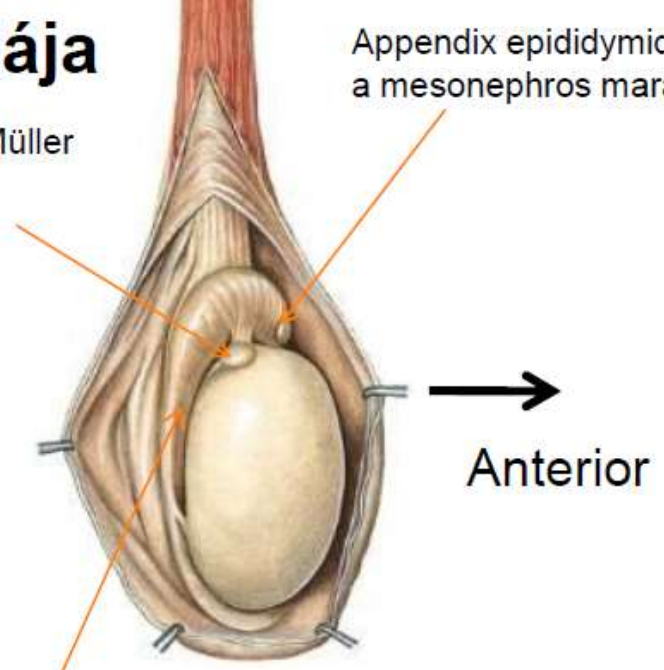
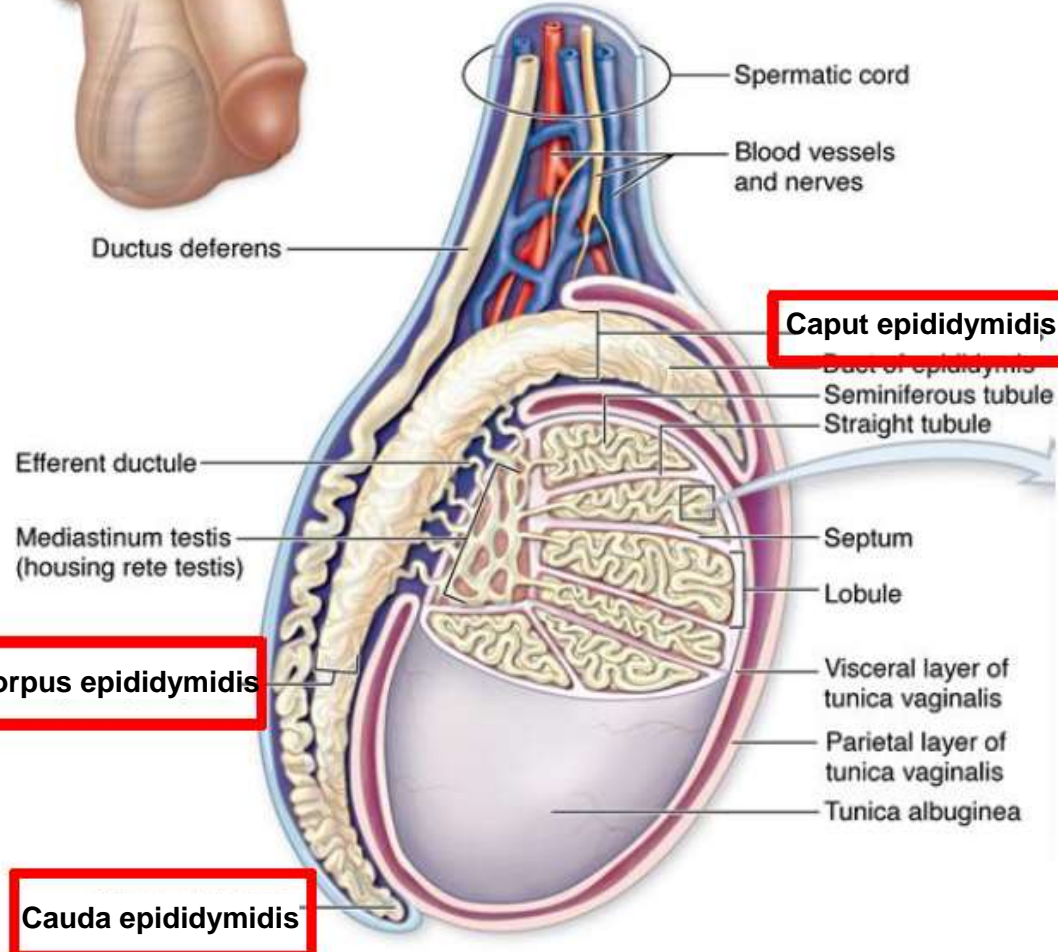
Férfi genitáliák



Epididymis (mellékhere)- anatómiája

Appendix testis – a Müller vezeték maradványa

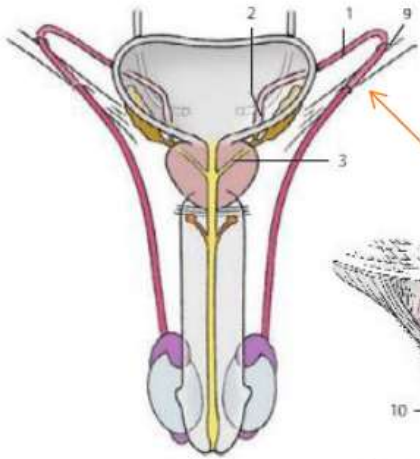
Appendix epididymidis - a mesonephros maradványa



Hereburkok!!!

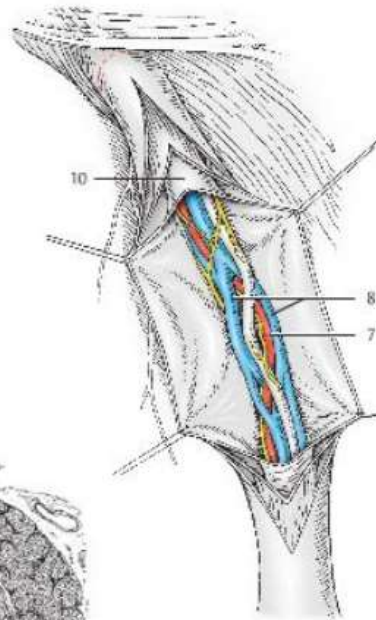
Ductus deferens (vas deferens) - ondóvezeték

- 30-45 cm hosszú
- 3-3,5 mm vastag

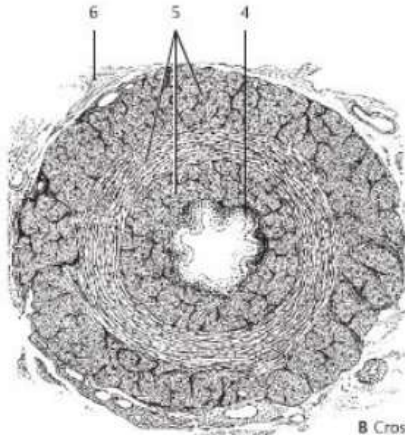


A Seminal ducts, anterior aspect

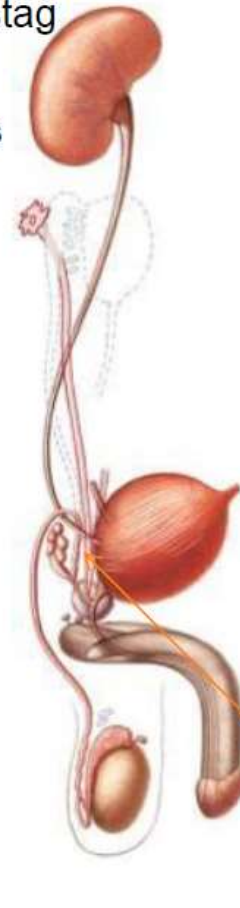
Canalis inguinalis



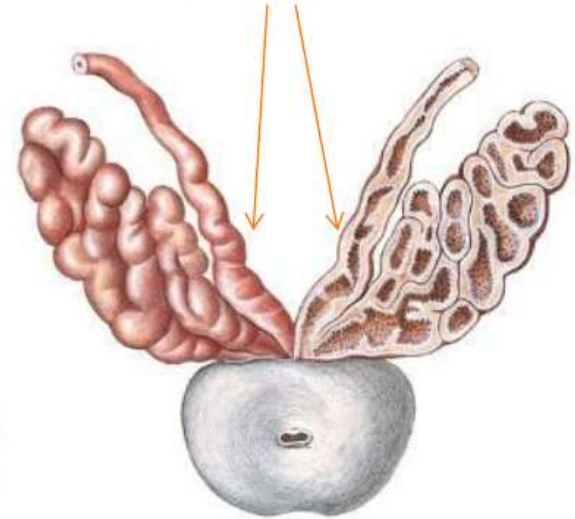
C Spermatic cord



B Cross-section through ductus deferens



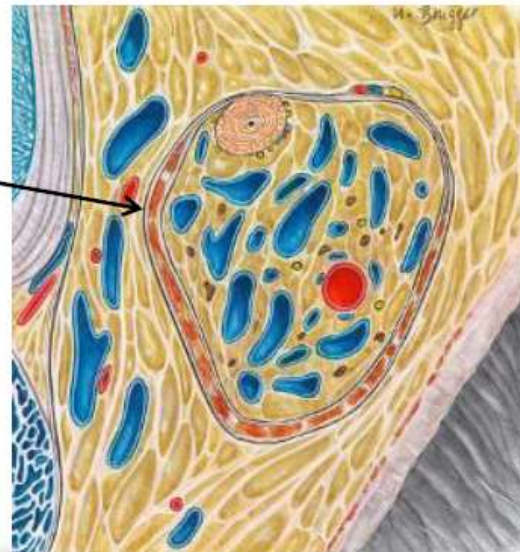
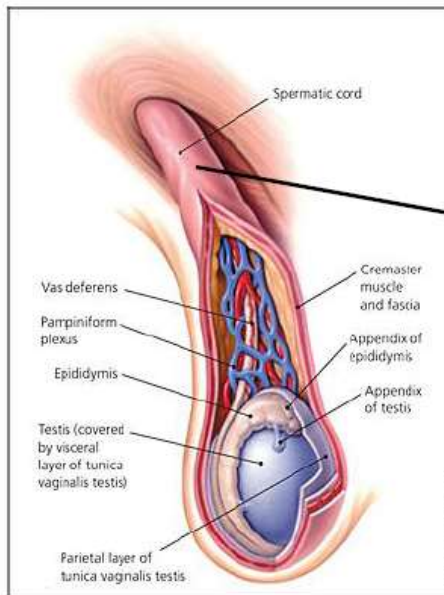
Ampulla ductus def.



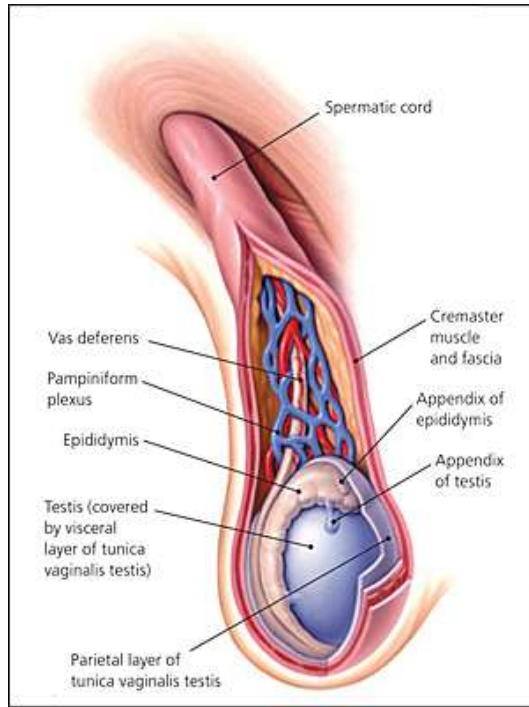
Az ureterrel való kereszteződése!!!

Funiculus spermaticus (ondózsínór)

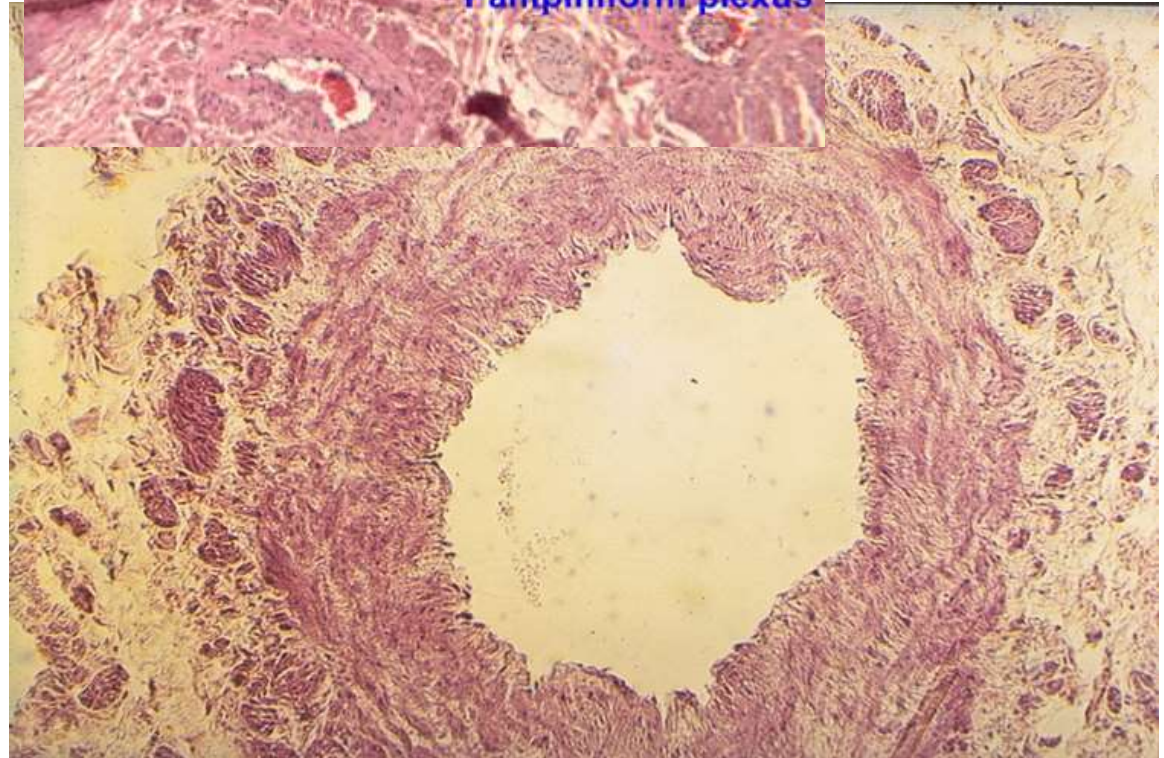
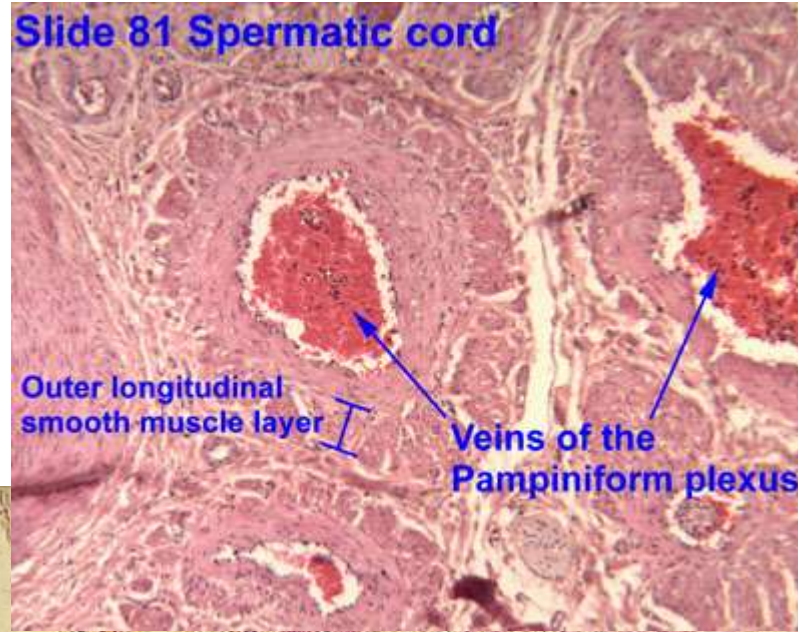
- Ductus deferens
 - a. testicularis
- Plexus pampiniformis (testicularis véna)
 - a. ductus deferentis
- Vegetativ idegek
 - ramus genitalis nervus genitofemoralis



Plexus pampiniformis– muscularis véna



Slide 81 Spermatic cord



HASFAL

Bőr

Dermis

Felületes hasi fascia

Fascia abdominalis superficialis

M. obliquus ext. abdominis fasciája

M. obliquus internus abdominis

M. transversus abdominis

Fascia transversalis

Peritoneum

SCROTUM

Herezacskó bőre

Tunica dartos

Fascia spermatica externa

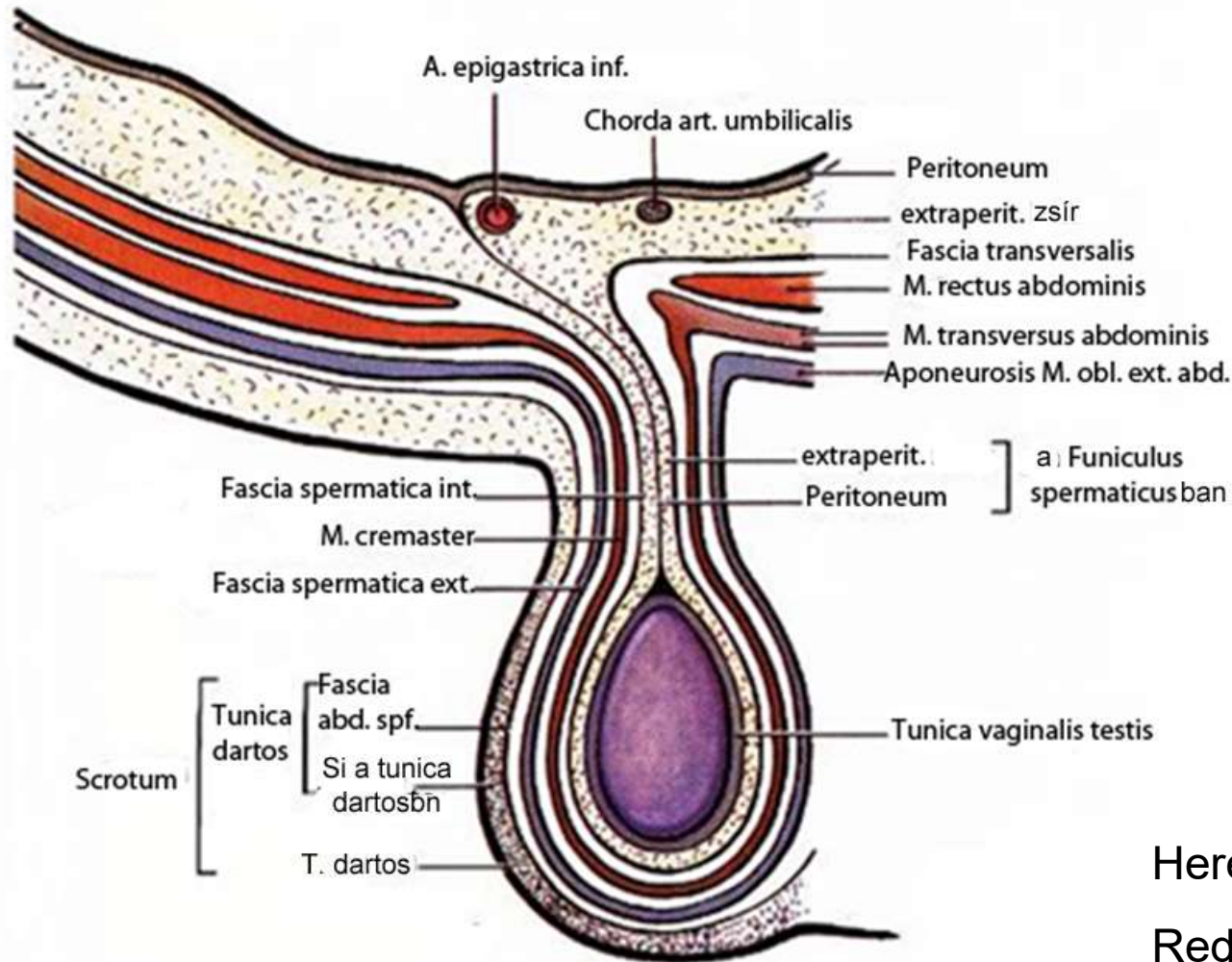
M. cremaster

Fascia spermatica interna

Tunica vaginalis testis

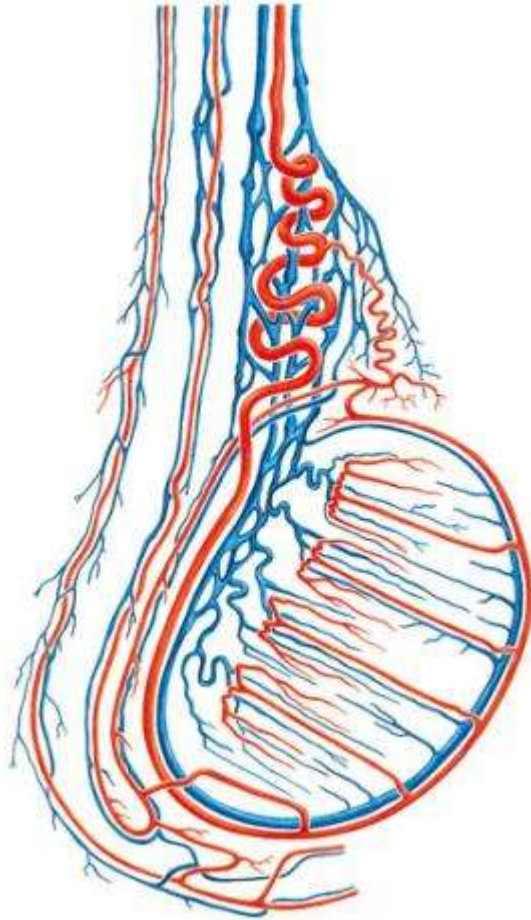


Hereburkok



Herezacskó bőre:
Redőzött, erősebben pigmentált, faggyúmirigyek, elszórva szőrtüszők

Testis, epididymis és ductus deferens vérellátása

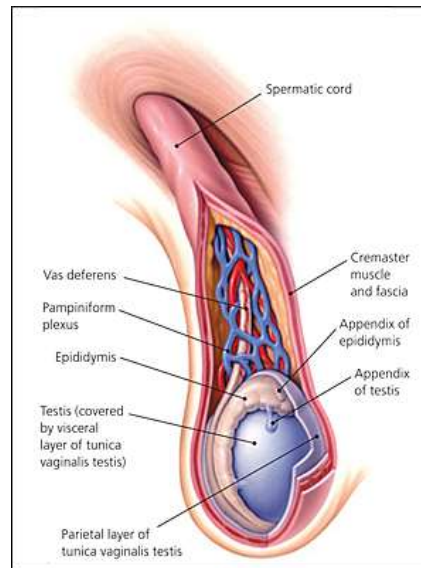


A. testicularis ← aorta abdominalis
a. ductus deferentialis ← a. iliaca interna

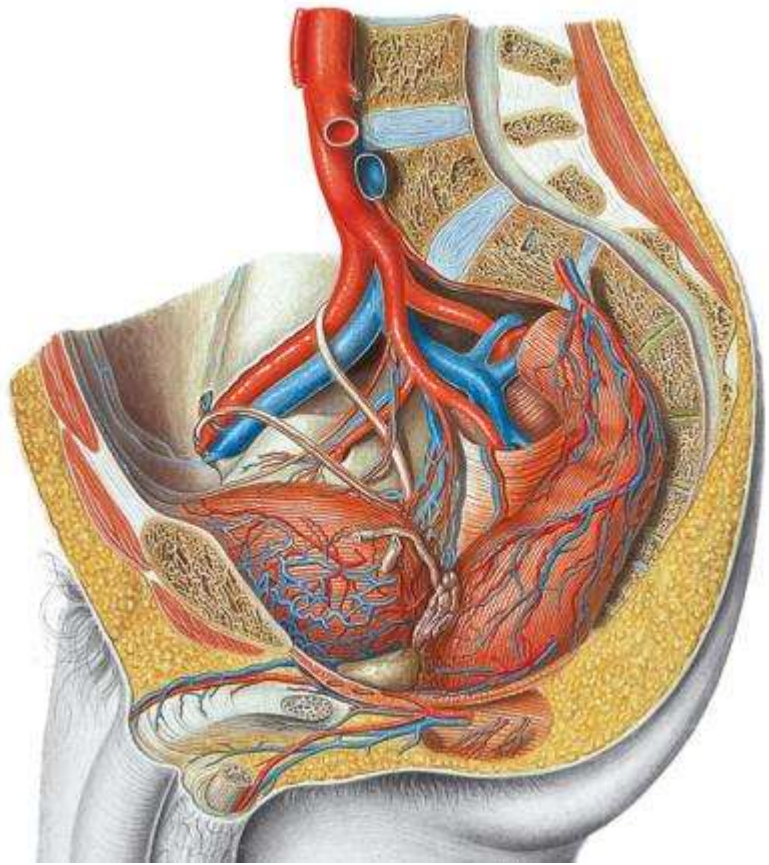
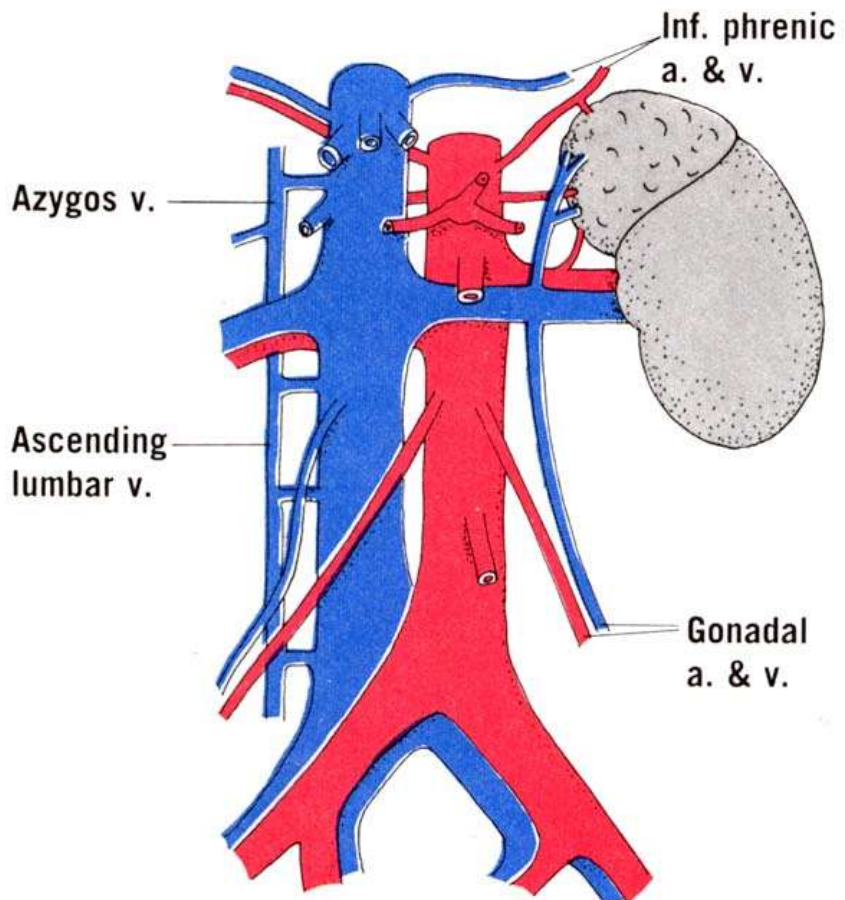
Pampiniform plexus

→ bal:bal v. renalis

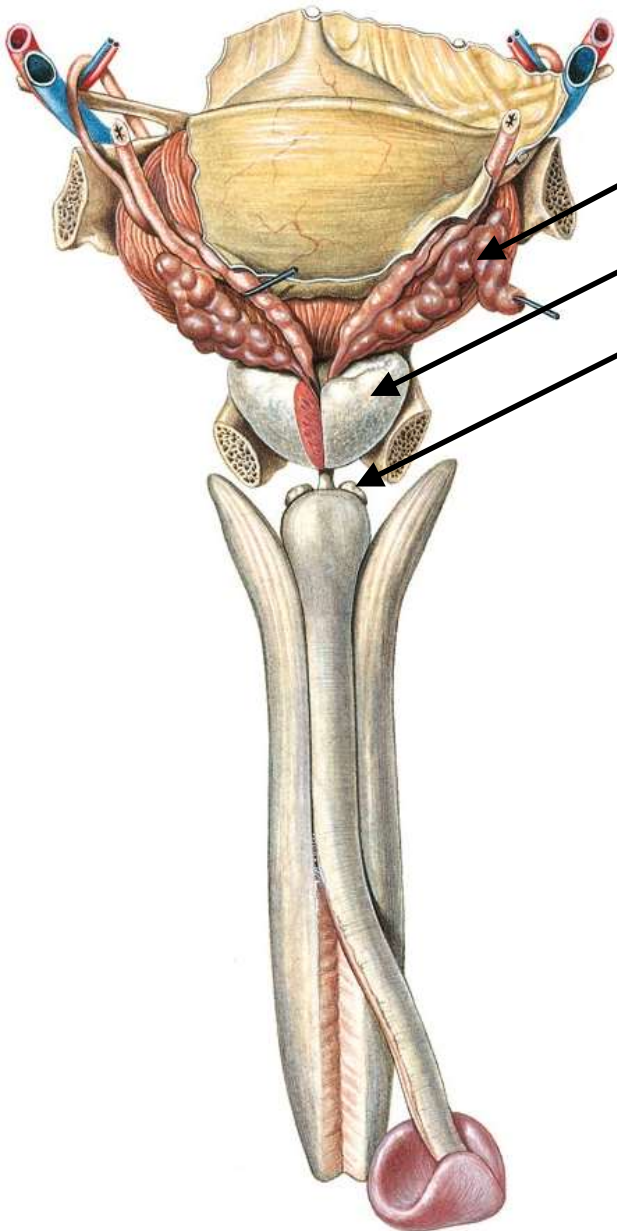
→ jobb: vena cava inferior



37 °C → 34 °C



Férfi járulékos nemi mirigyek



Vesicula seminalis (ondóhólyag)

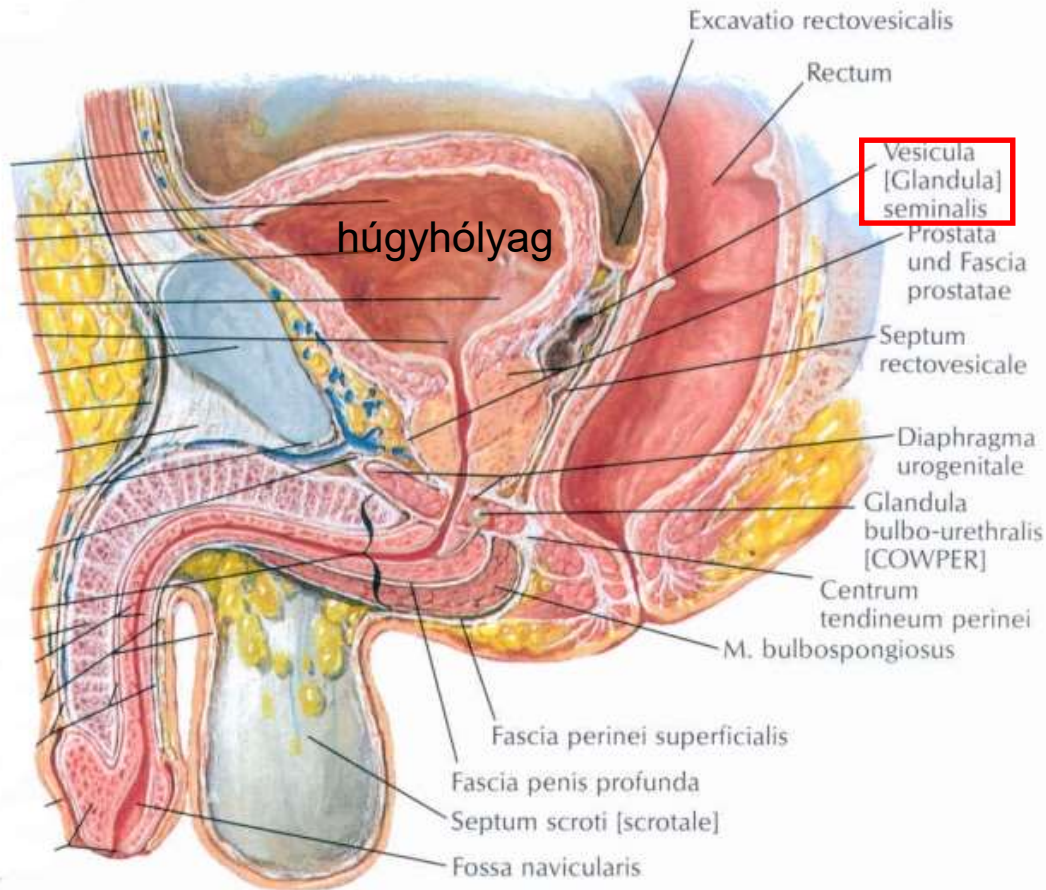
Prostata (dűlmirigy)

Glandula bulbourethralis (Cowper-mirigy)

- Ejakulátum fő tömegét termelik
- Hormon (tesztoszteron) szenzitívek
- Férfi urogenitális csatornához kapcsolódnak

Ejaculatum (~2ml)= 10% a prostatából + 10%
vas deferens-ből + 75% a vesicula seminálisból
+ 5% a Cowper mirigyekből+ <0.1%
spermatozoa

Vesicula seminalis (Glandula vesiculosa)



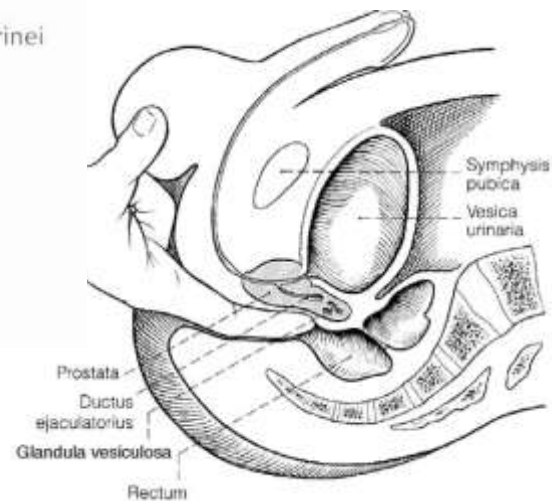
•5x1x1 cm

•15 cm-es, erősen felcsavarodott csatorna

•Kötőszövetes tok

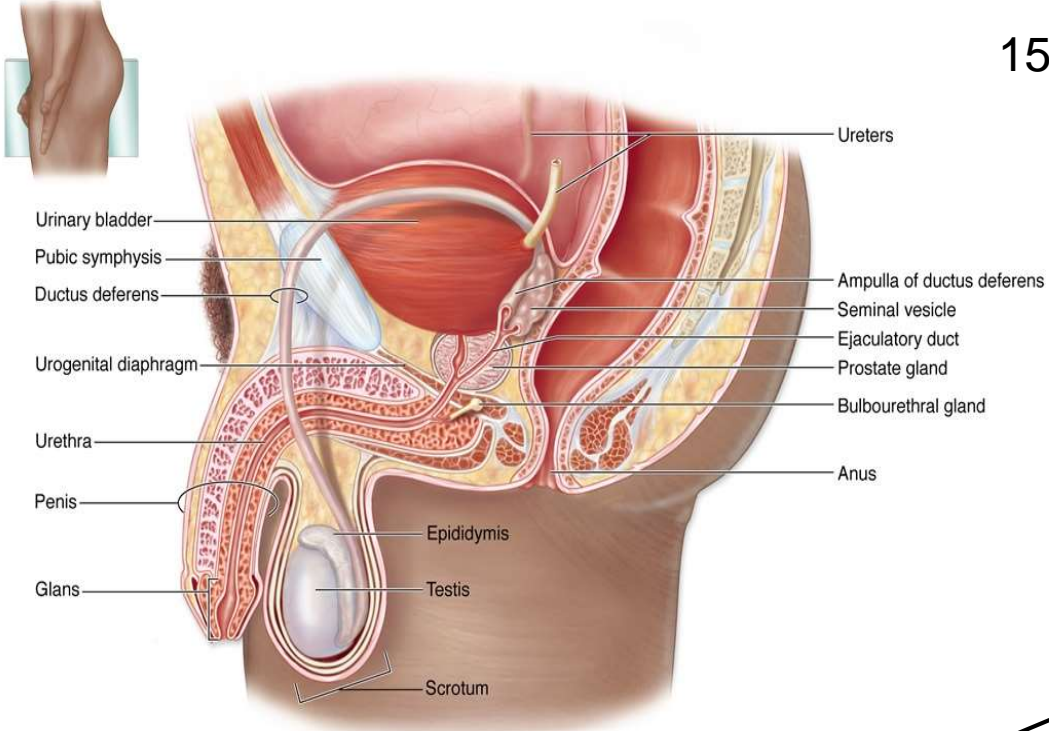
a. vesicalis inf., a. ductus deferentialis, a. rectalis media

Plexus vesicoprostaticus

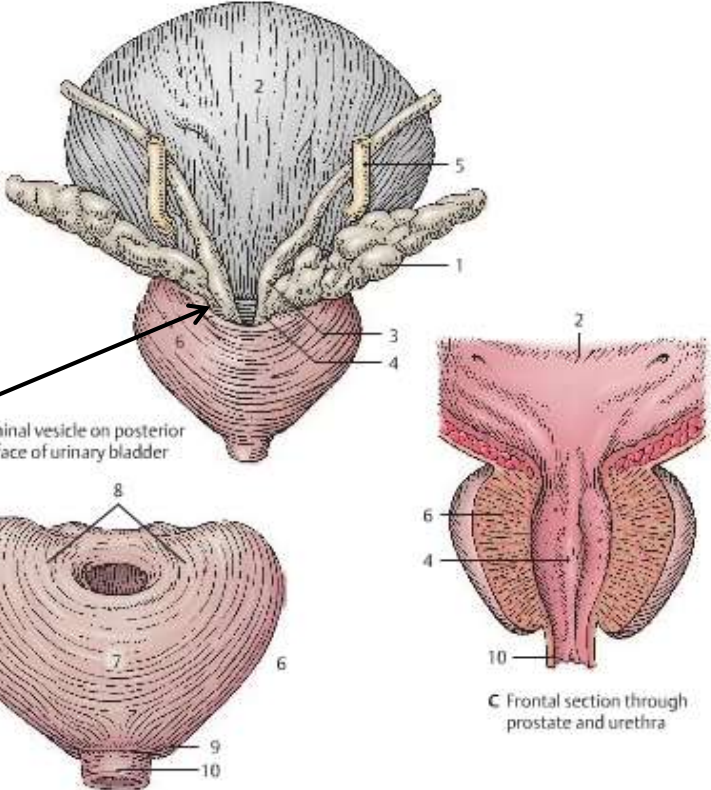


Vesicula seminalis

15 cm-5 cm hosszú cső felcsavarodva



Páros szerv



→ ductus excretorius!!!
 +
 = duct ejaculatorius

Ampulla of ductus deferens

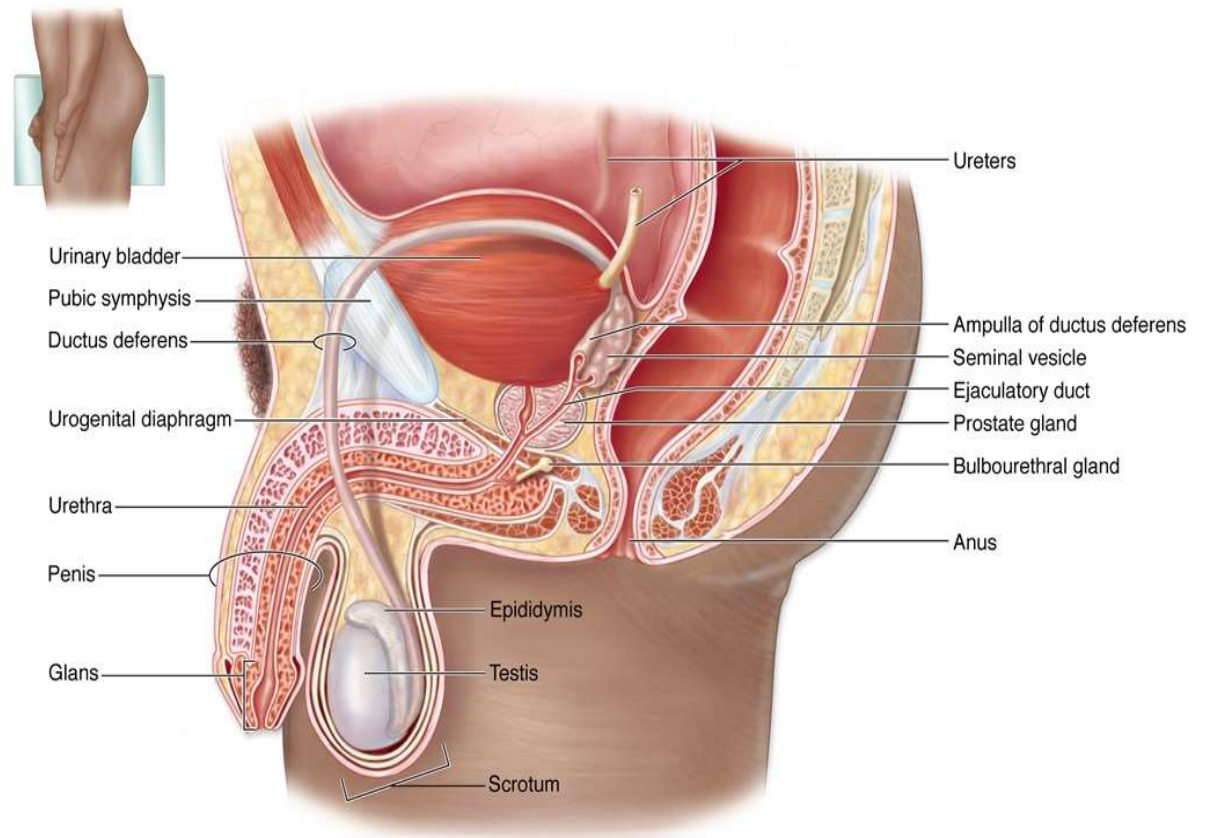
Vesicula seminalis

Vérellátása:

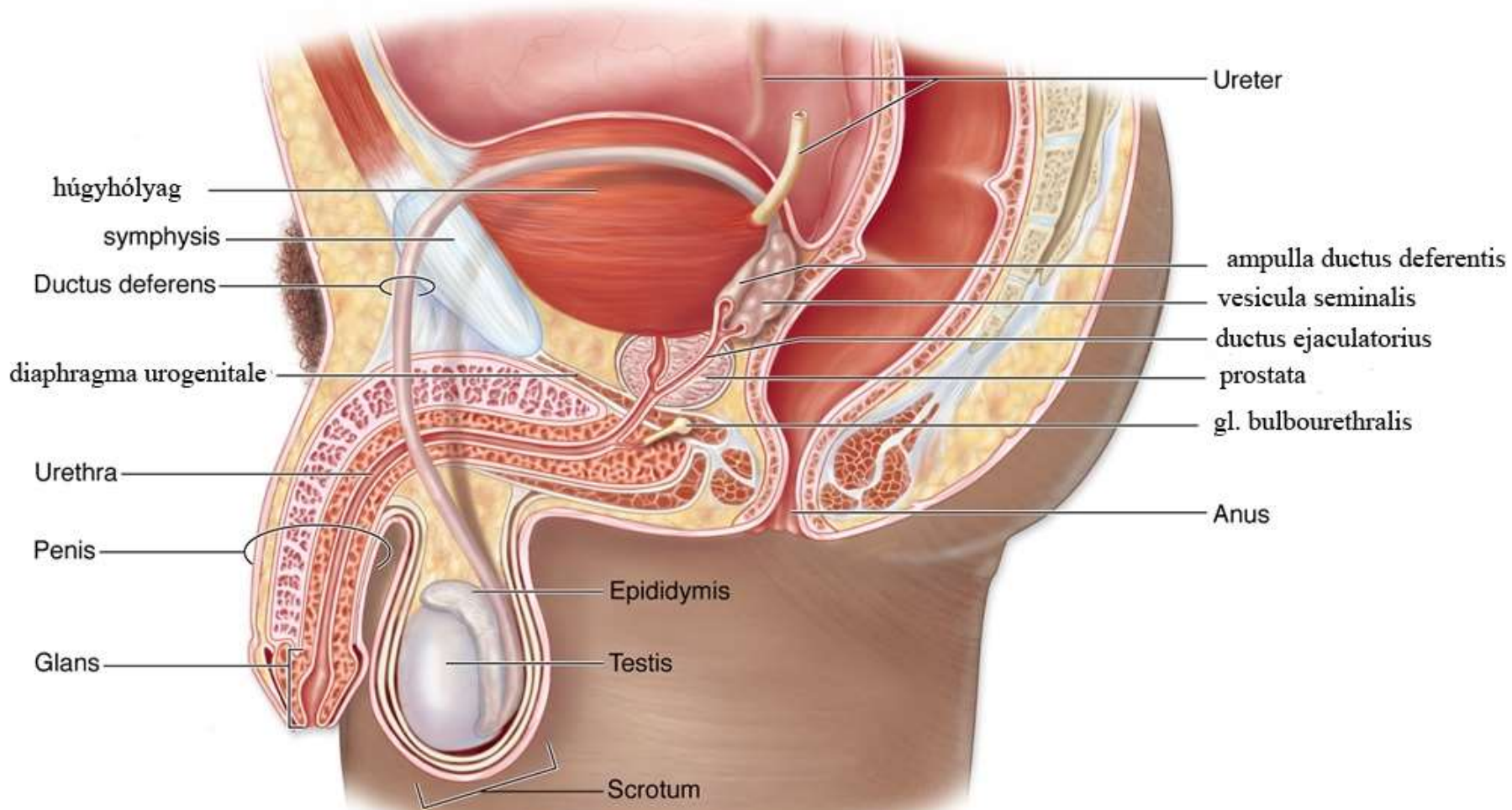
- A. vesicalis inferior
- A. ductus deferentialis
- A. rectalis media
- Plexus venosus prostaticus

Peritonealis pozíció:

infraperitonealis



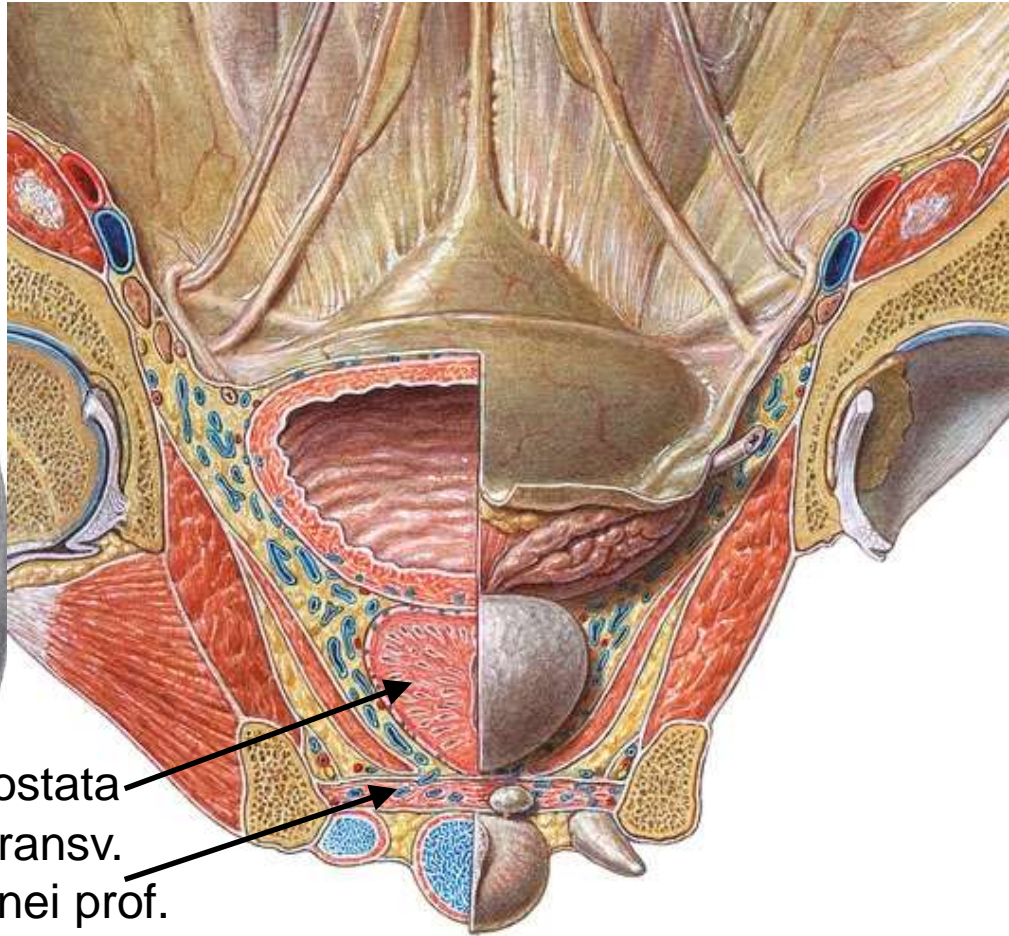
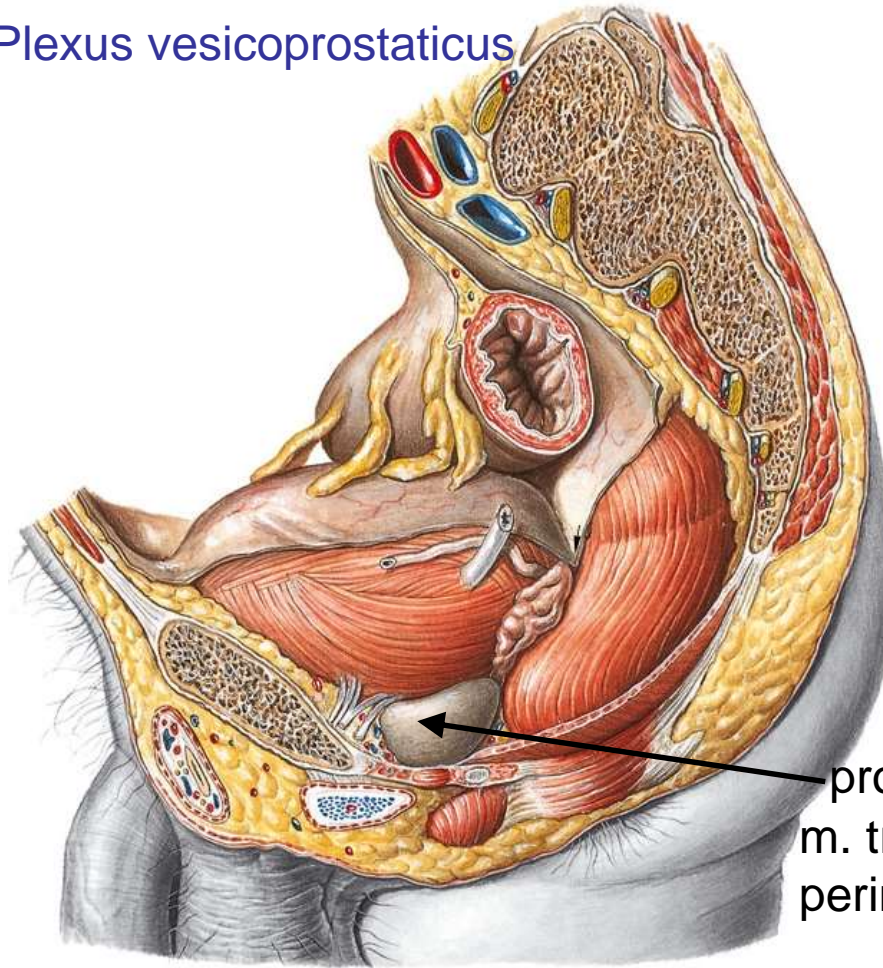
Prostata



A. rectalis media, a. vesicalis
inf., a. pudenda int.

Prostata

Plexus vesicoprostaticus



prostata
m. transv.
perinei prof.

3x4x2 cm, 20-25 g

30-50 mirigy, 15-20
kivezetőcső (ductuli
prostatici) → pars
prostatica urethreaba

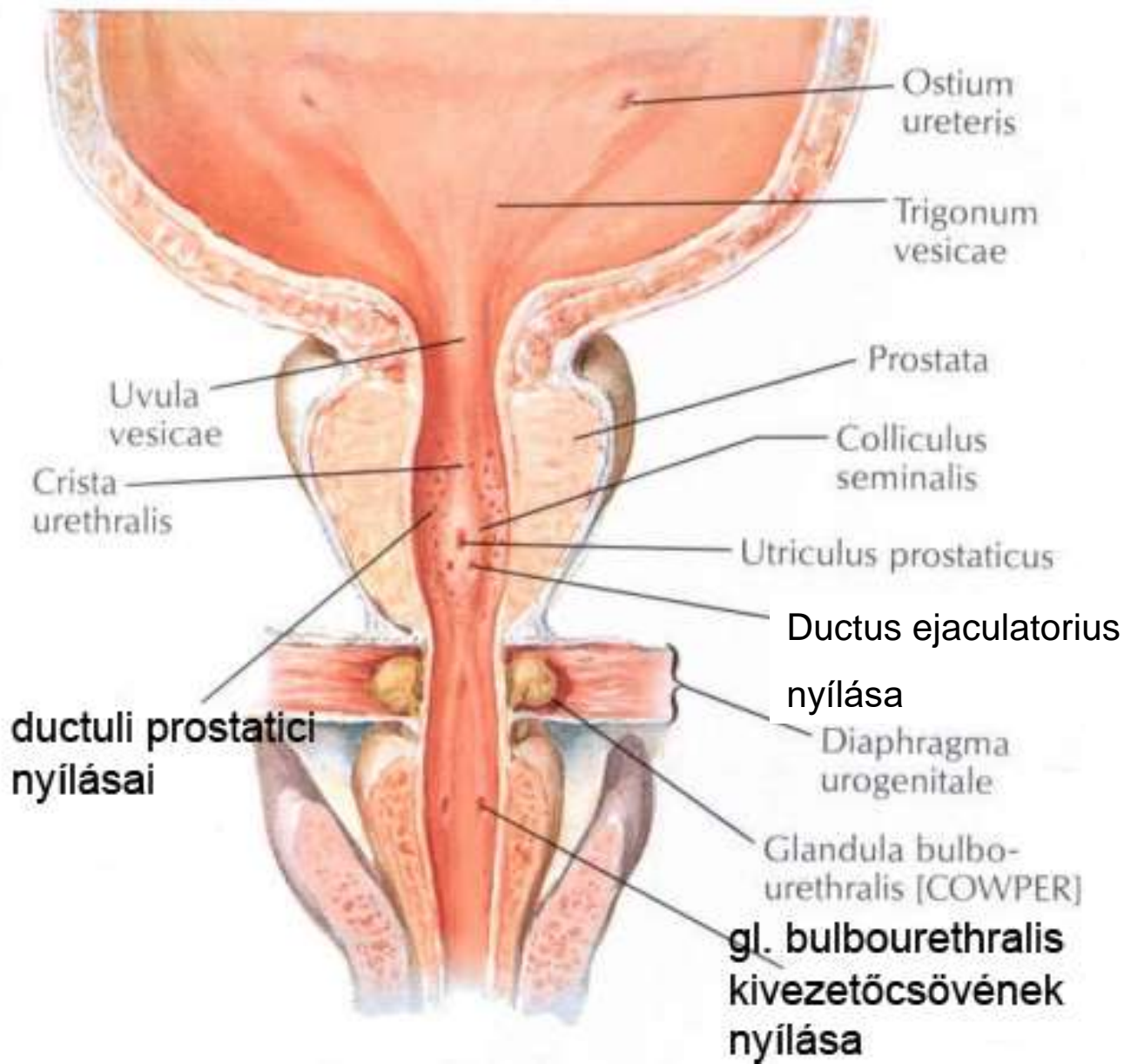
Basis: húgyhólyag

Apex: m. transv. perinei prof. fasciája

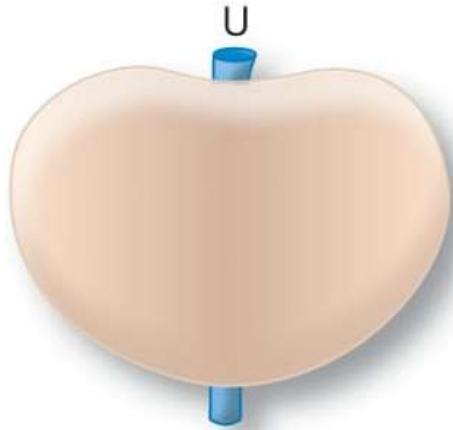
Ventral: lig. puboprostaticum → os pubis belfel­színe

Dorsal: Denonvillier-fascia, rectum

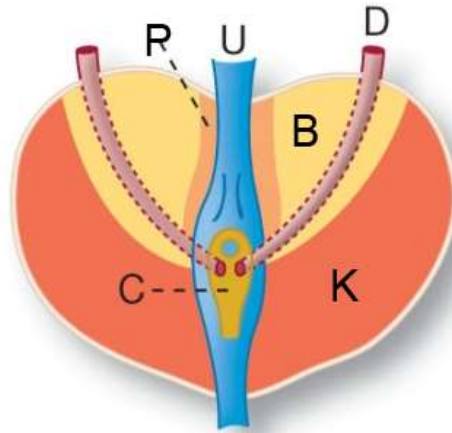
Prostata



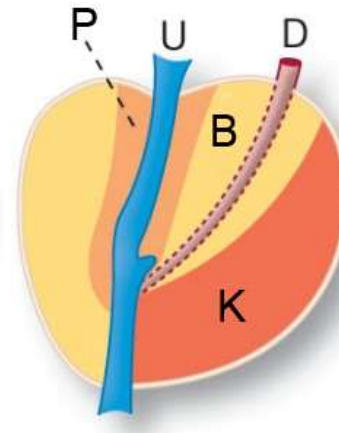
Prostata, felosztás



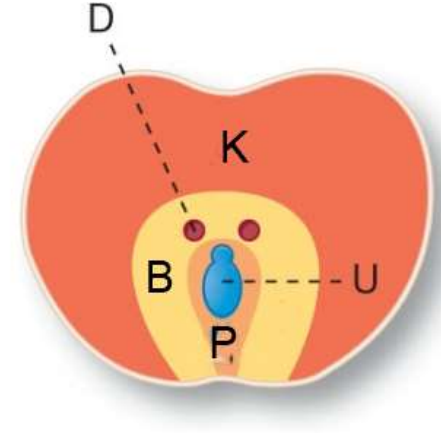
hátulnézet



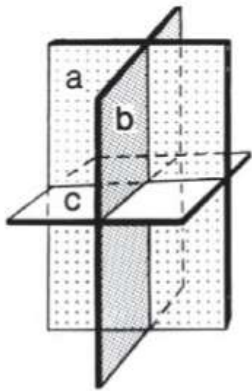
frontális metszet



sagittális metszet



horizontális metszet



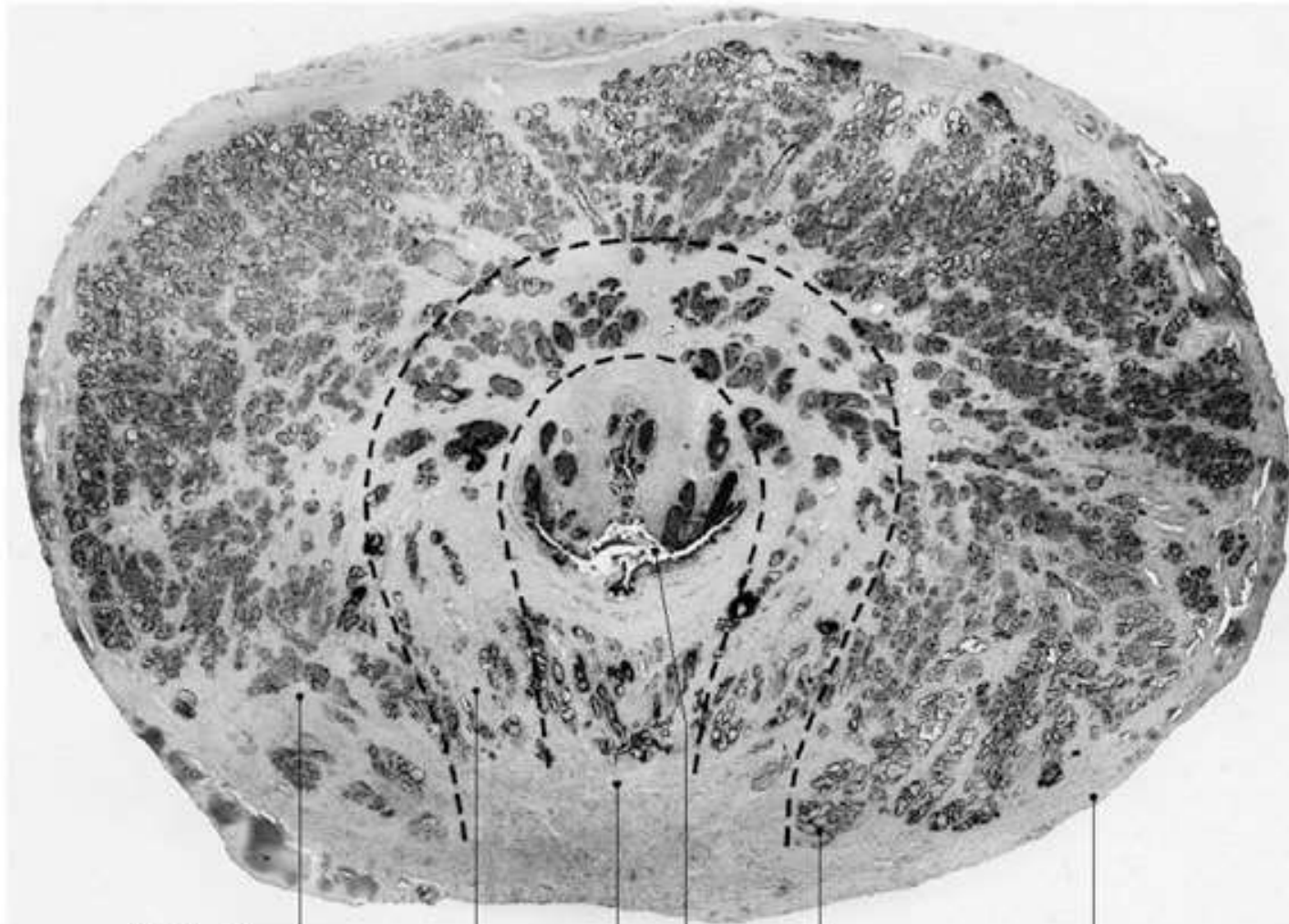
P: periurethrális, mucosus mirigyek
B: belső zóna, submucosus mirigyek
K: külső zóna, főmirigyek

U = Urethra
C = Colliculus seminalis
D = Ductus ejaculatorius

Belső zóna: prostata hyperplázia

Külső zóna: prostata carcinoma

Prostata



külső zóna

belső zóna

Urethra

mirigyek

tok

periurethrális köpenyzóna

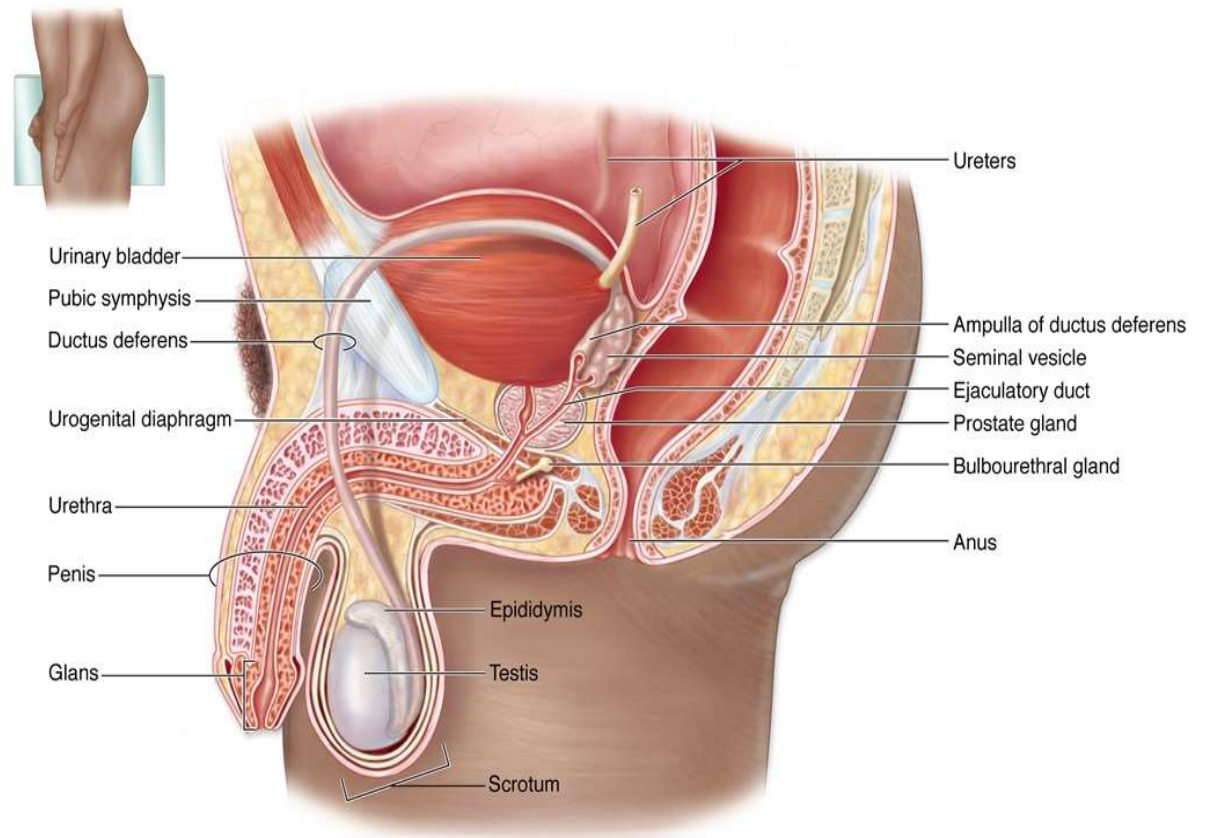
Prostata

Vérellátása:

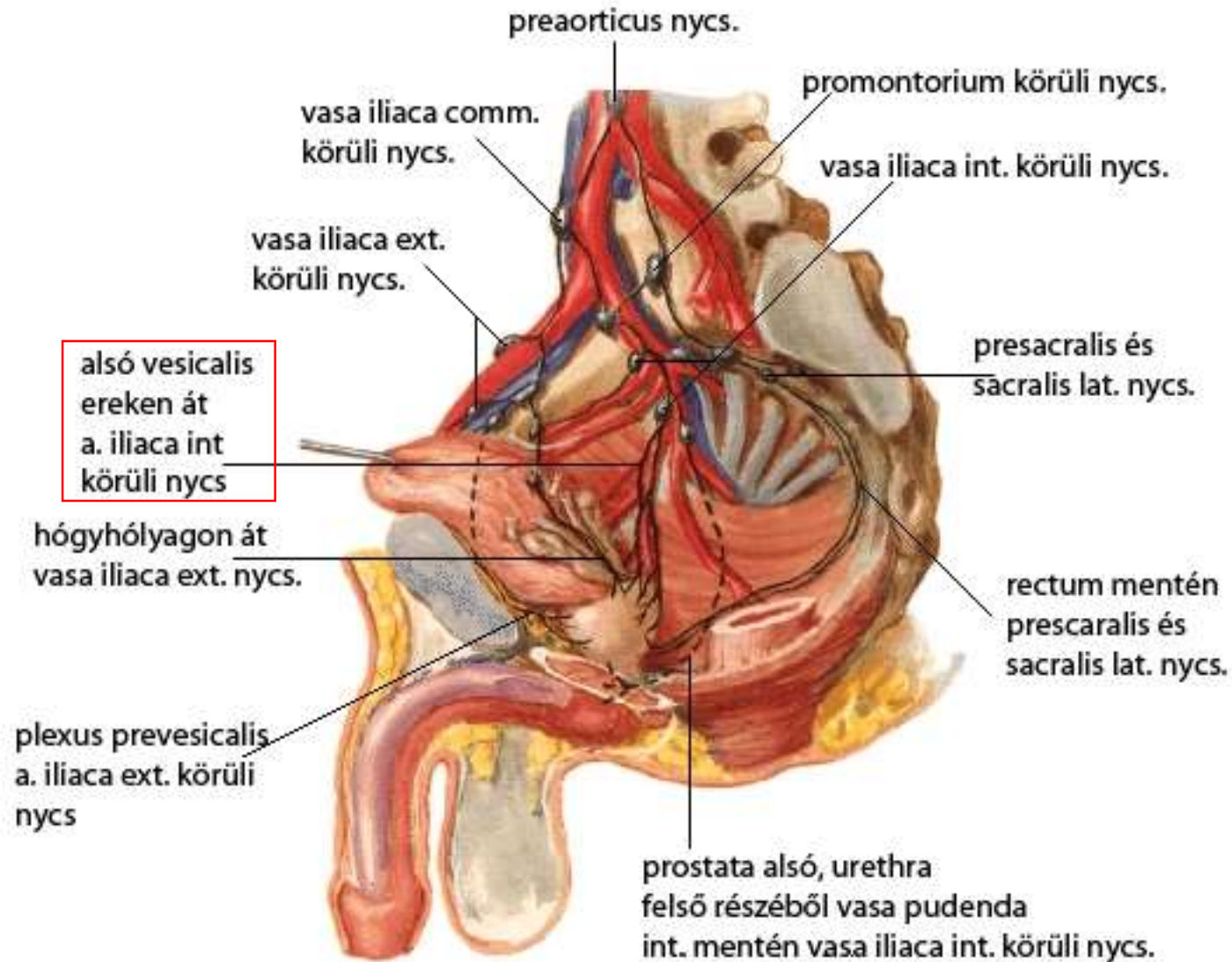
- A. vesicalis inferior
- A. pudenda interna
- A. rectalis media

- Plexus venosus prostaticus

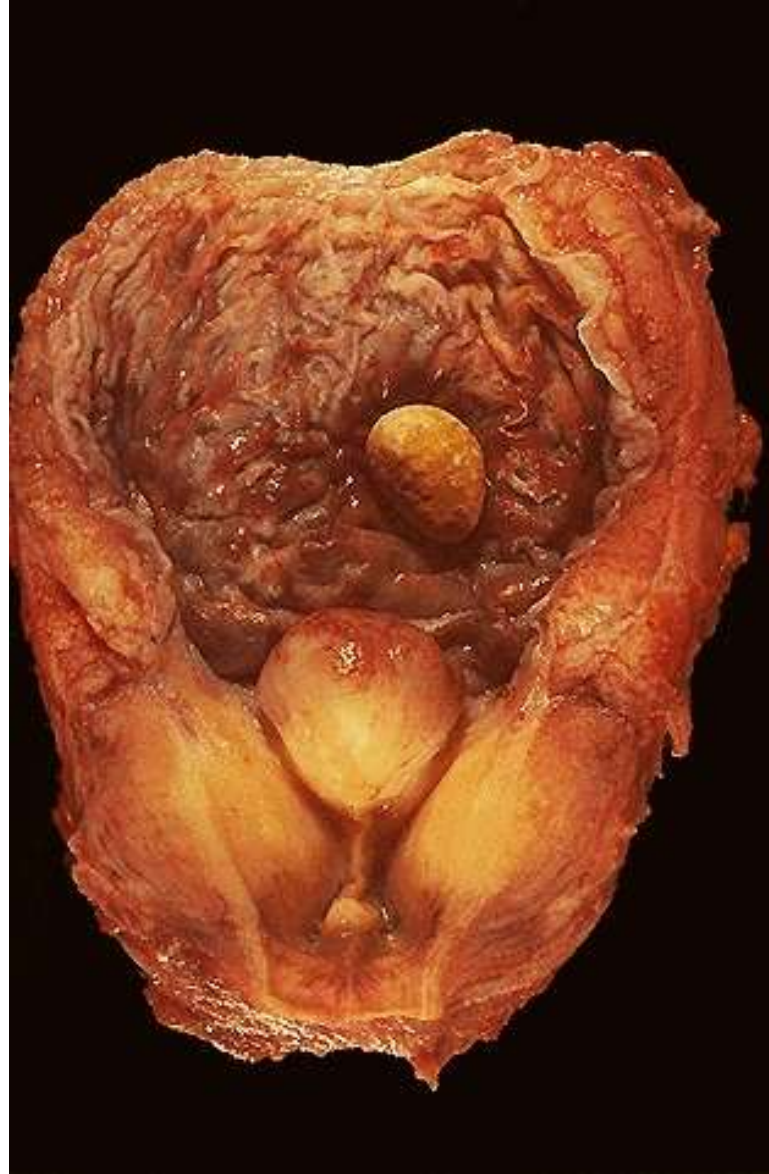
Peritonealis pozíció:
infraperitonealis



Prostata nyirokelvezetése



Prostata hyperplasia



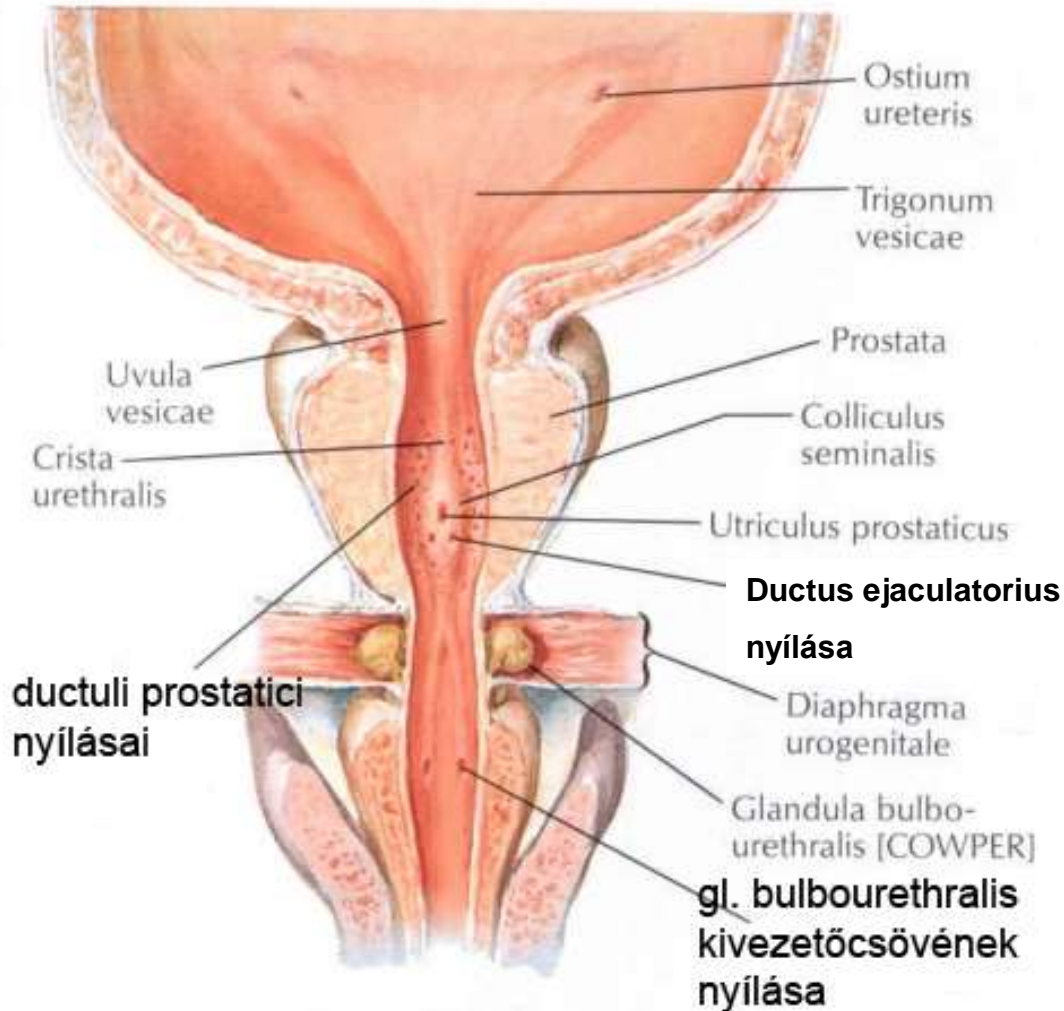
Prostata carcinoma



Plexus vesicoprostaticus
kapcsolatban áll a gerinc körüli
vénás fonattal →
csigolyametasztázisok
Combnyaktörés: lehet első tünet!

csontmetasztázisok

Glandula bulbourethralis (Cowper-mirigy)



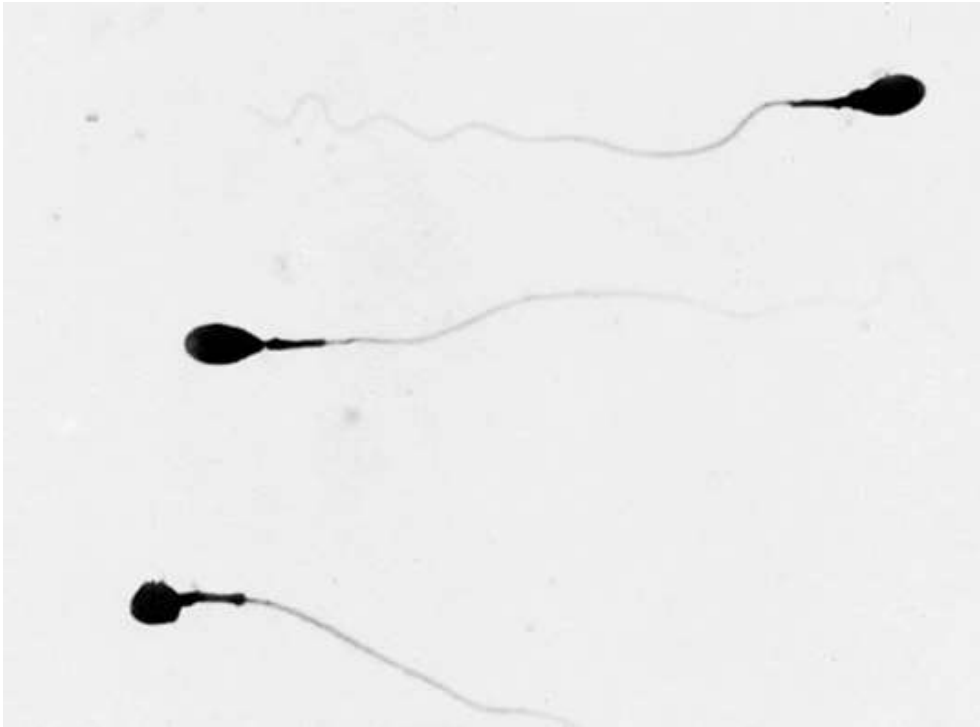
Páros, lencse nagyságú

Diaphragma urogenitaléba ágyazva

Tubuláris végkamrák, simaizom



Sperma (=ejakulátum)



2-4 ml

Sejtes rész:

Spermiumok (40 millió/ml, éretlen alakok is), női genit. csatornában 4-5 napig mozgékonyak

Hámsejtek

Leukocyták, macrophagok

Seminalplazma:

Járulékos nemi mirigyek váladéka

Köszönöm a figyelmet!



References:

Dr. Kántor Orsolya és Dr. Hanics János előadásai

Benninghoff: Anatomie, 16. Aufl., 2003

Zilles-Tillmann: Anatomie, 2010

Sobotta: Atlas der Anatomie des Menschen, 22. Aufl., 2006

Welsch: Lehrbuch Histologie, 2006

Netter: Atlas der Anatomie des Menschen, 1989

Netter: Atlas of Human Anatomy, 1989