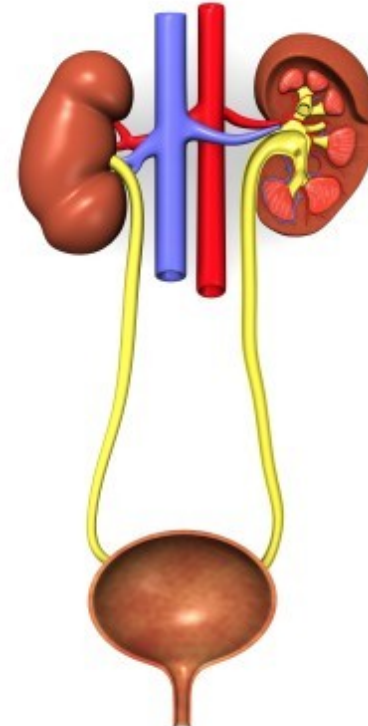
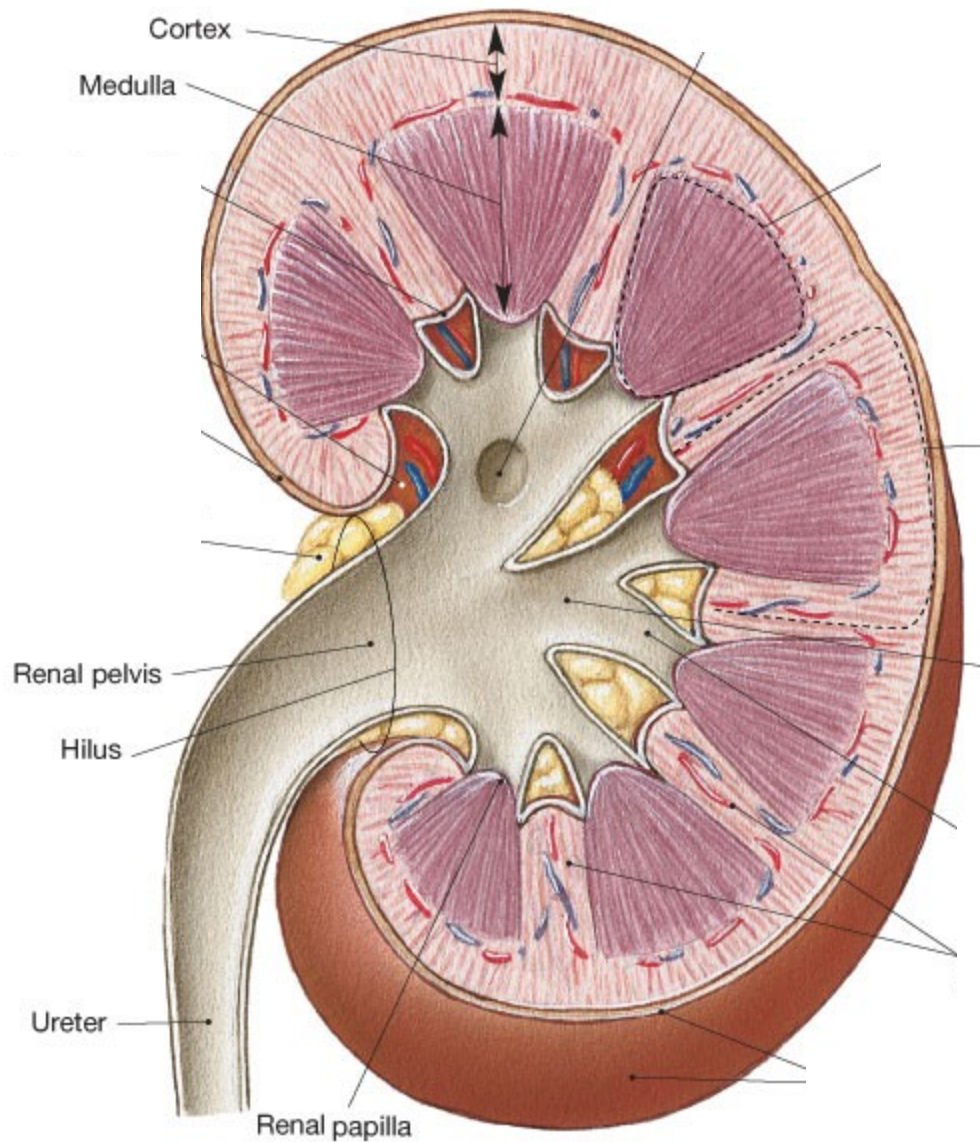




Urinary system

- **Ren**
- **Calyx renalis**
- **Ureter**
- **Vesica urinaria**
- **Urethra**





Kidney (ren, nephros)

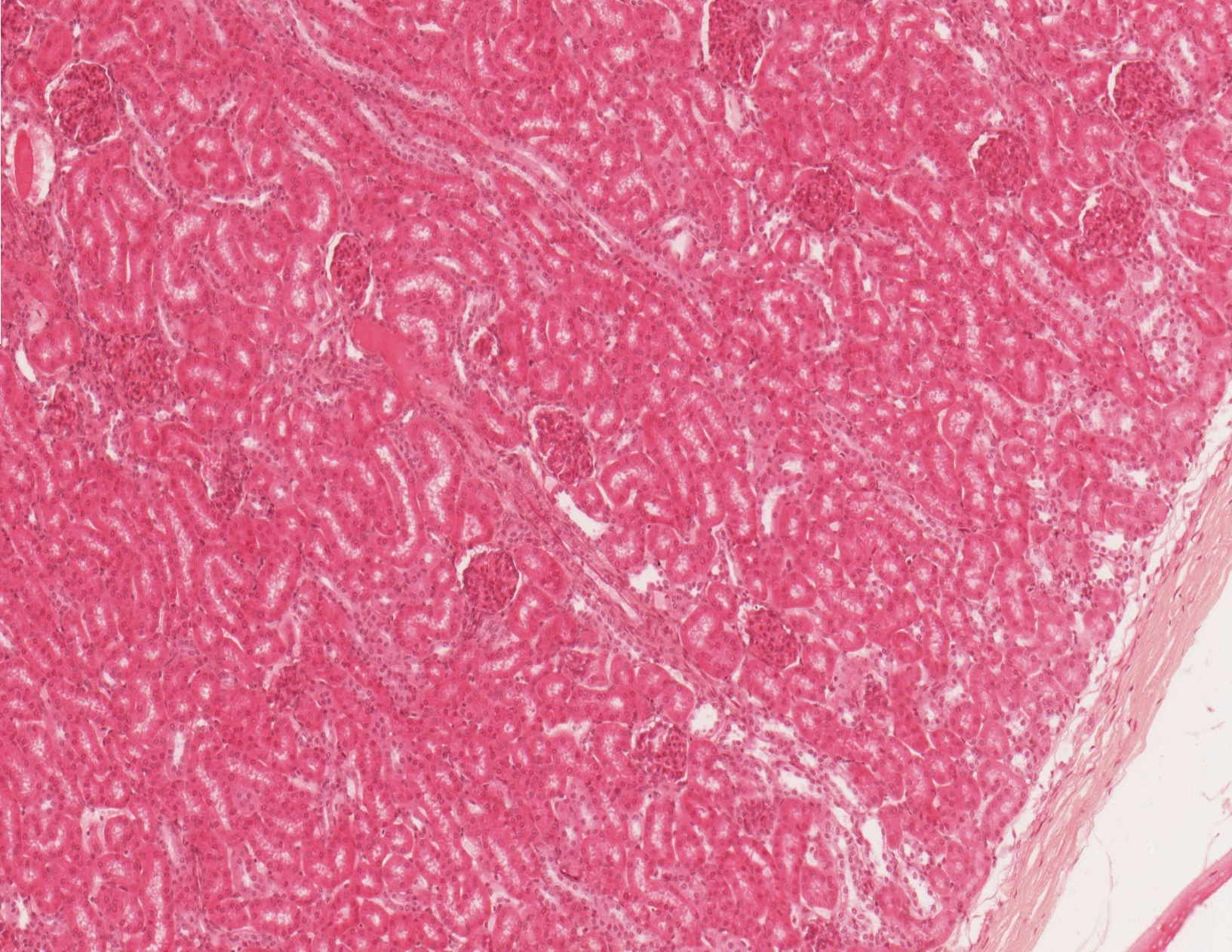
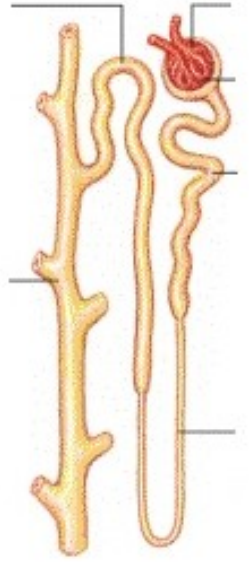
Capsula fibrosa
Capsula adiposa

Cortex:

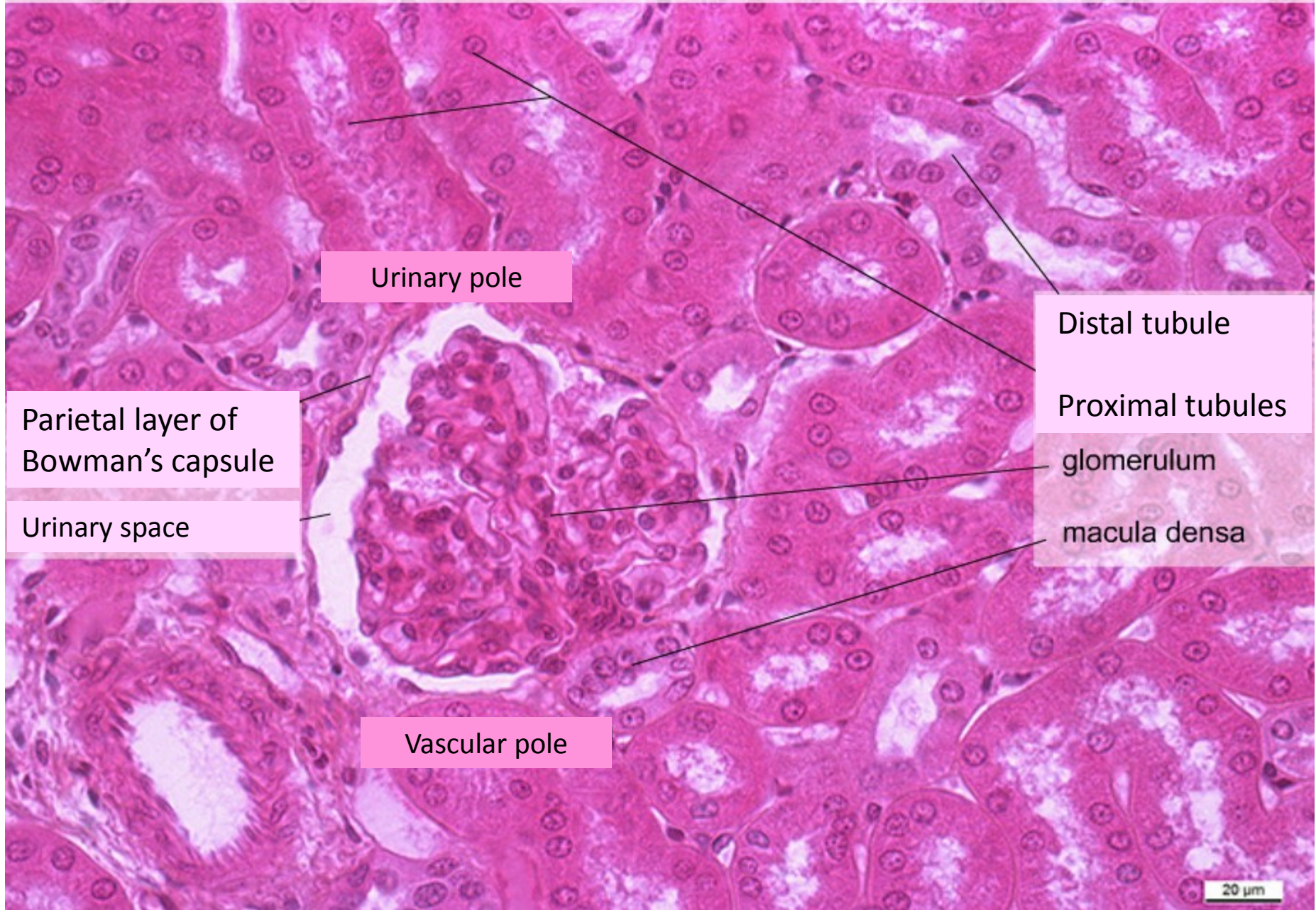
- cortex corticis
- pars radiata corticis
- columnae renales (Bertini)

Medulla:

- pyramides renales (10 – 18)
- papillae renales
- foramina papillaria in area cribrosa
- medullary rays



Ren – corpusculum renis, (HE), objektiv 40×



Urinary pole

Distal tubule

Parietal layer of Bowman's capsule

Proximal tubules

Urinary space

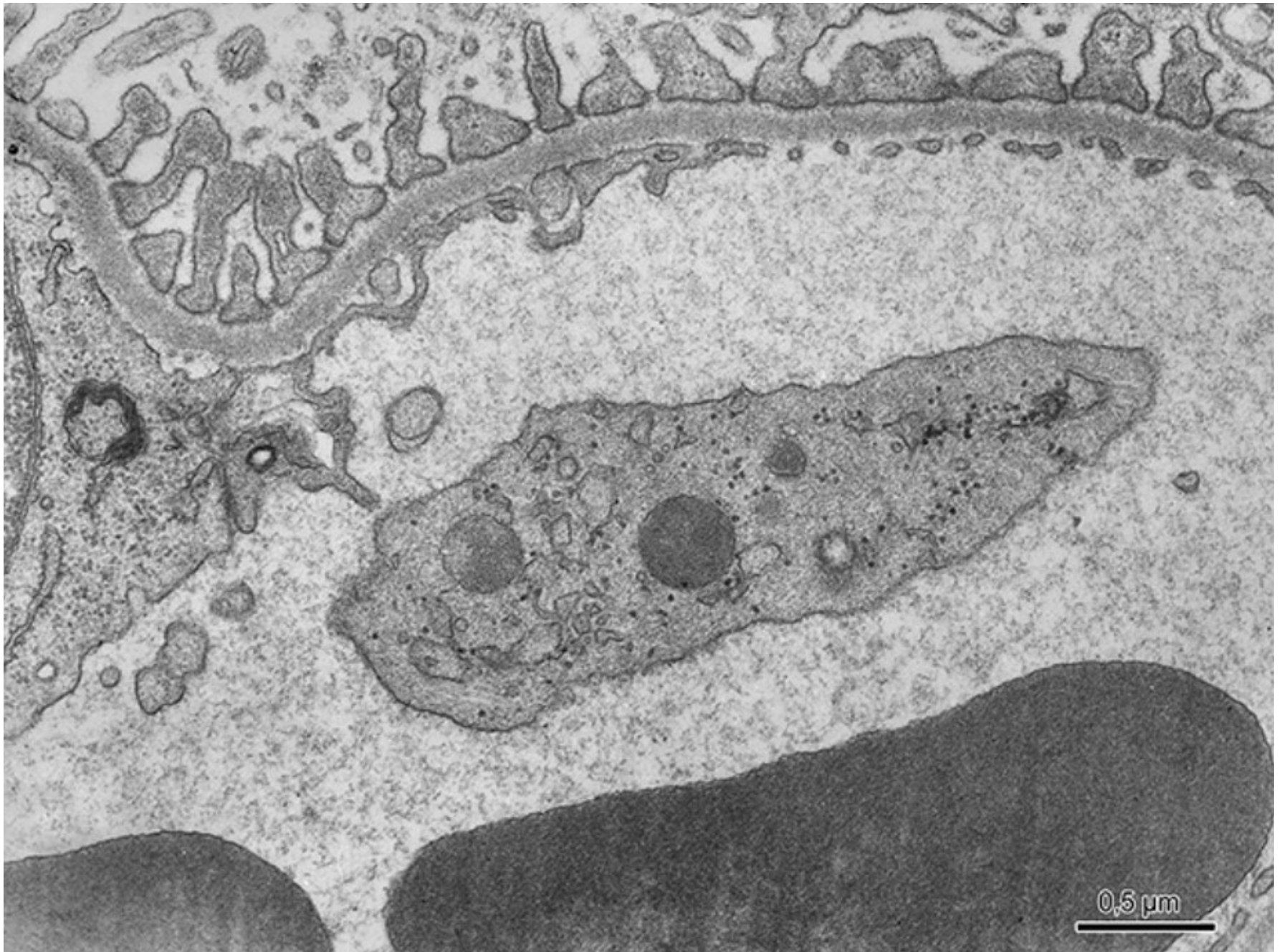
glomerulum

macula densa

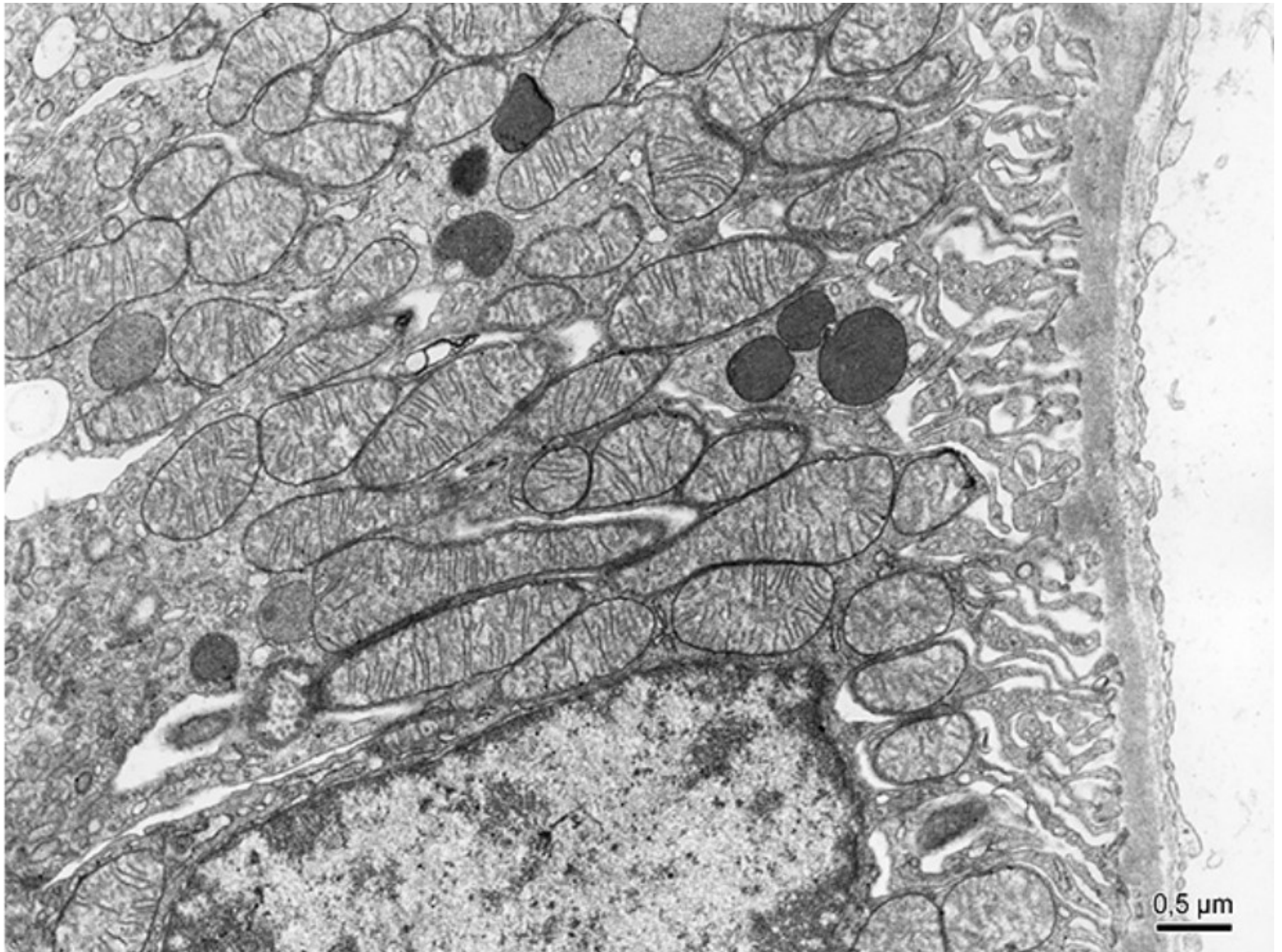
Vascular pole

20 μm

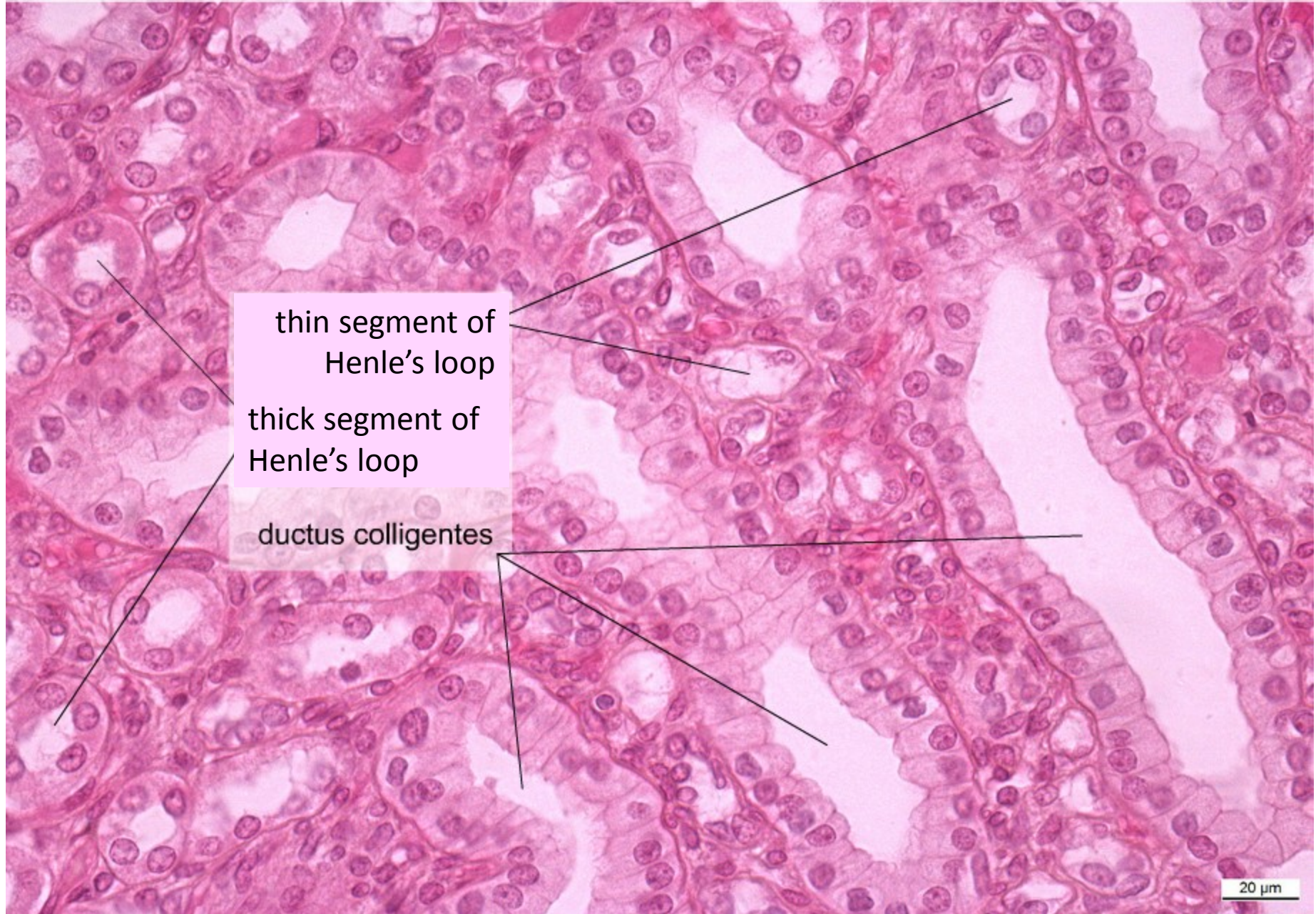
Filtration barrier



Basal labyrinth



Ren – medulla, (HE), objektiv 40×



thin segment of
Henle's loop

thick segment of
Henle's loop

ductus colligentes

Calyx renalis, (HE), objektiv 2,5x

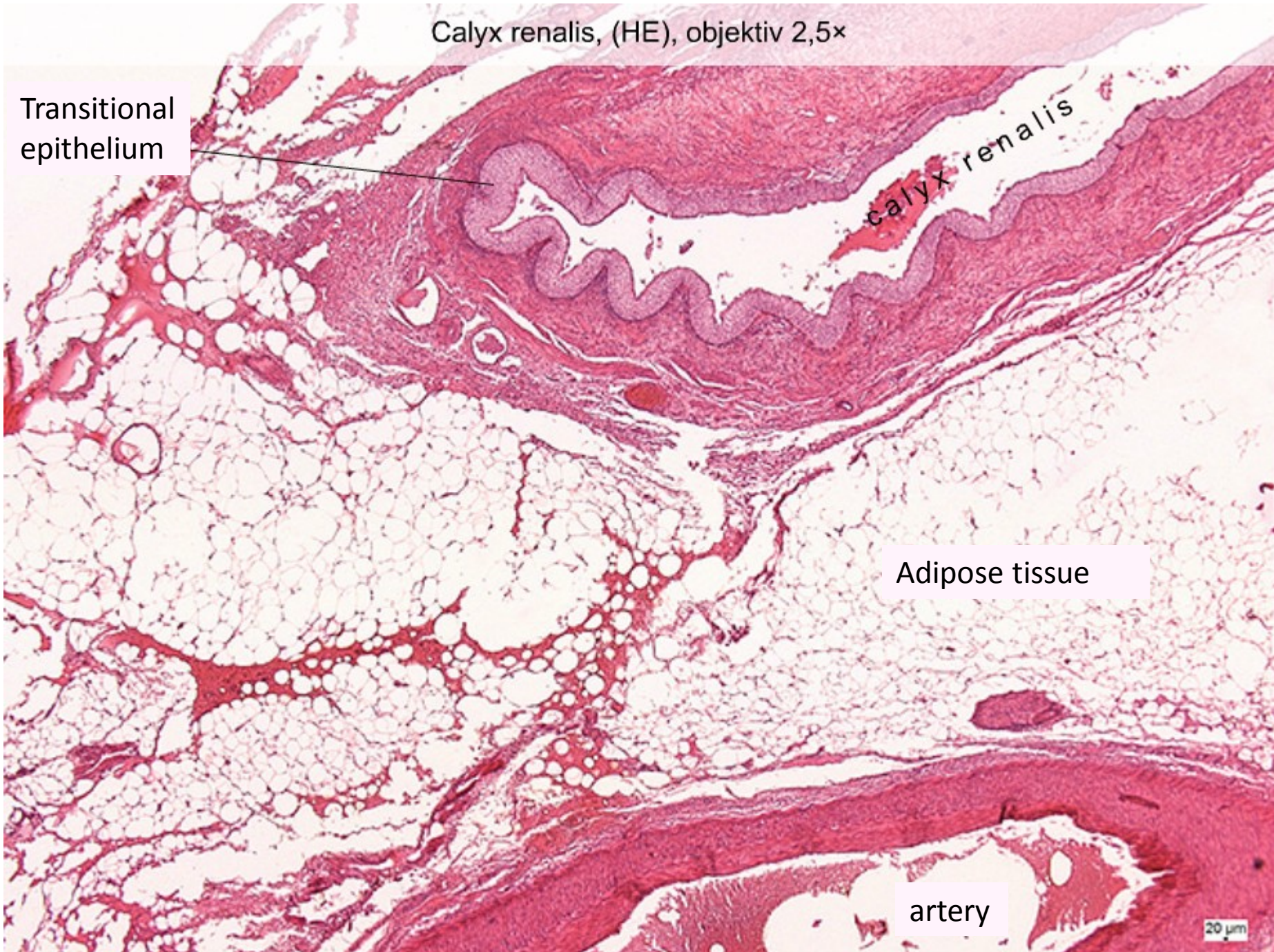
Transitional
epithelium

calyx renalis

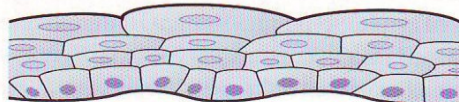
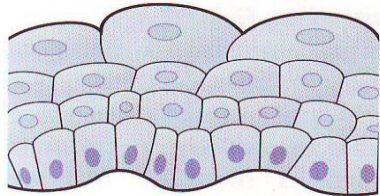
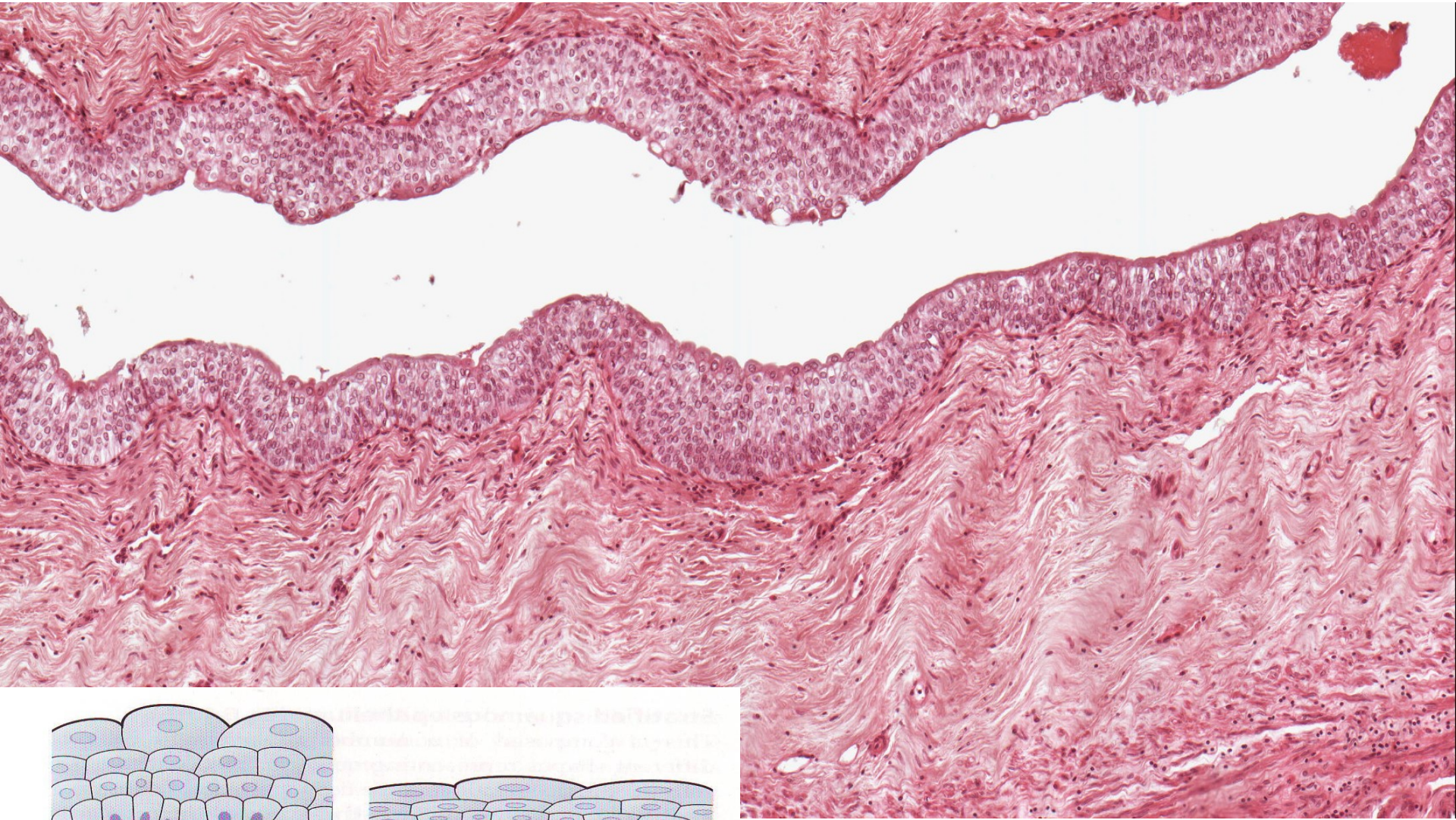
Adipose tissue

artery

20 μm



Calyx renalis (HE)



A Relaxed

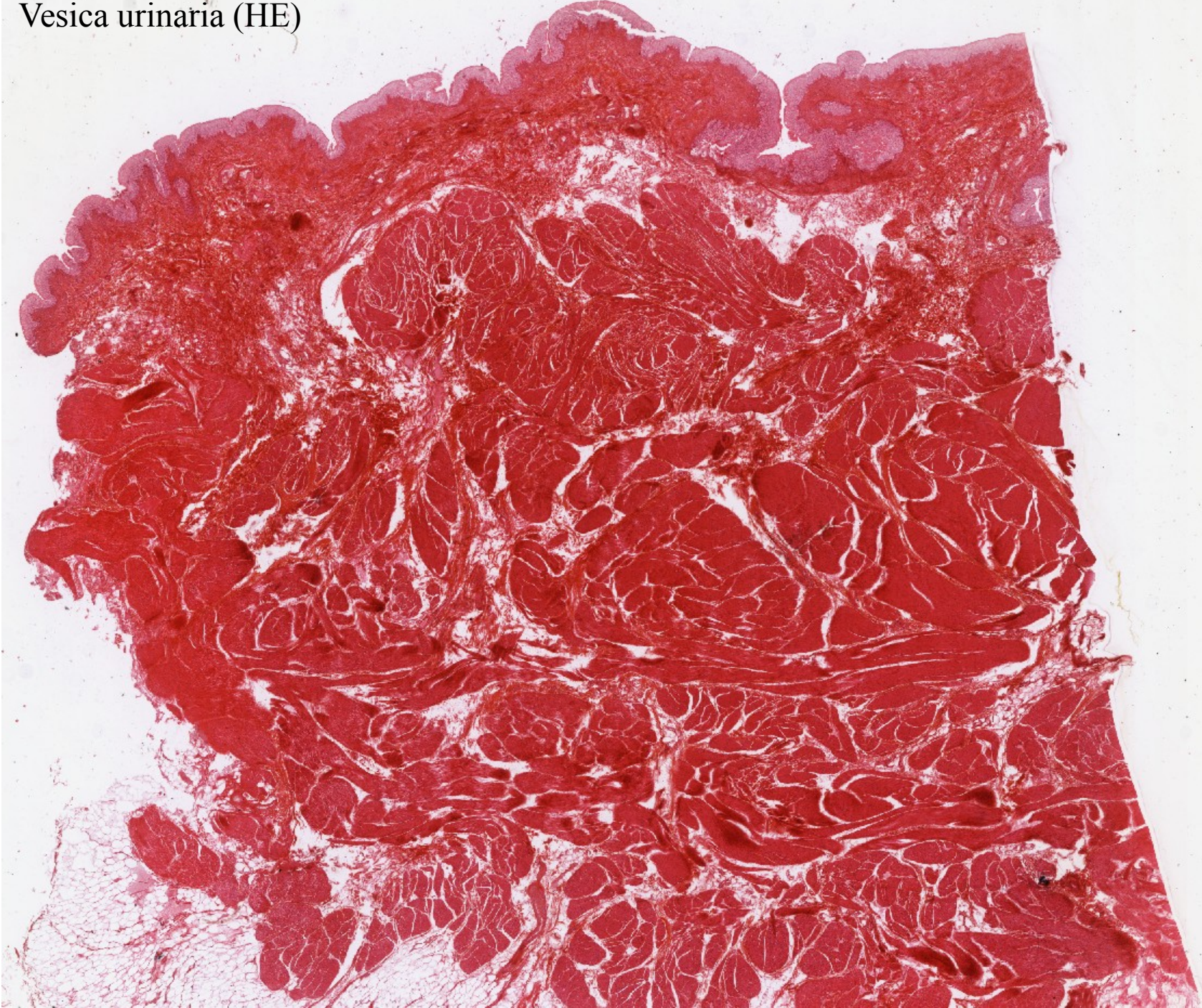
B Stretched

Transitional epithelium: A. Relaxed. B. Stretched.

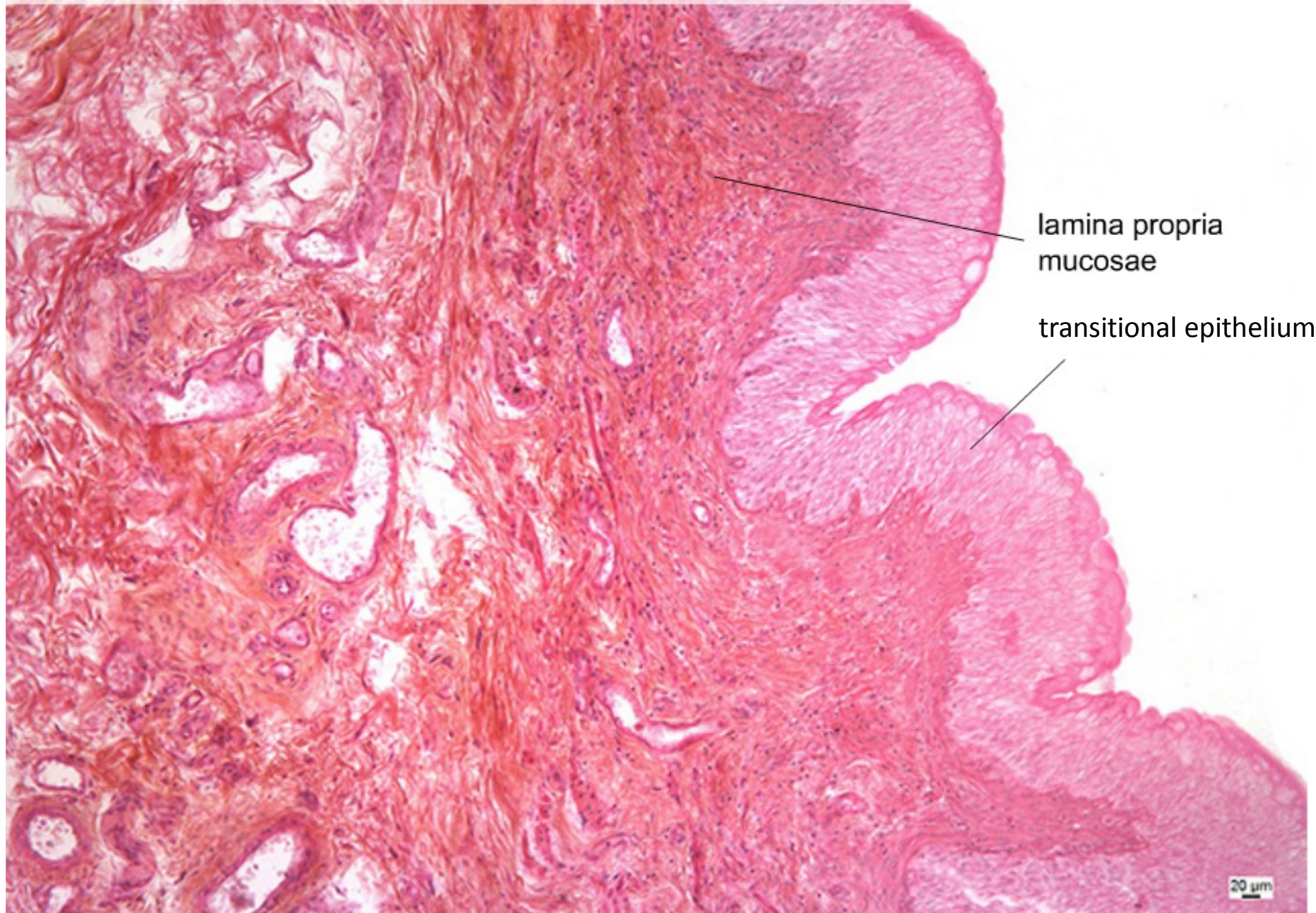
Ureter (HES)



Vesica urinaria (HE)



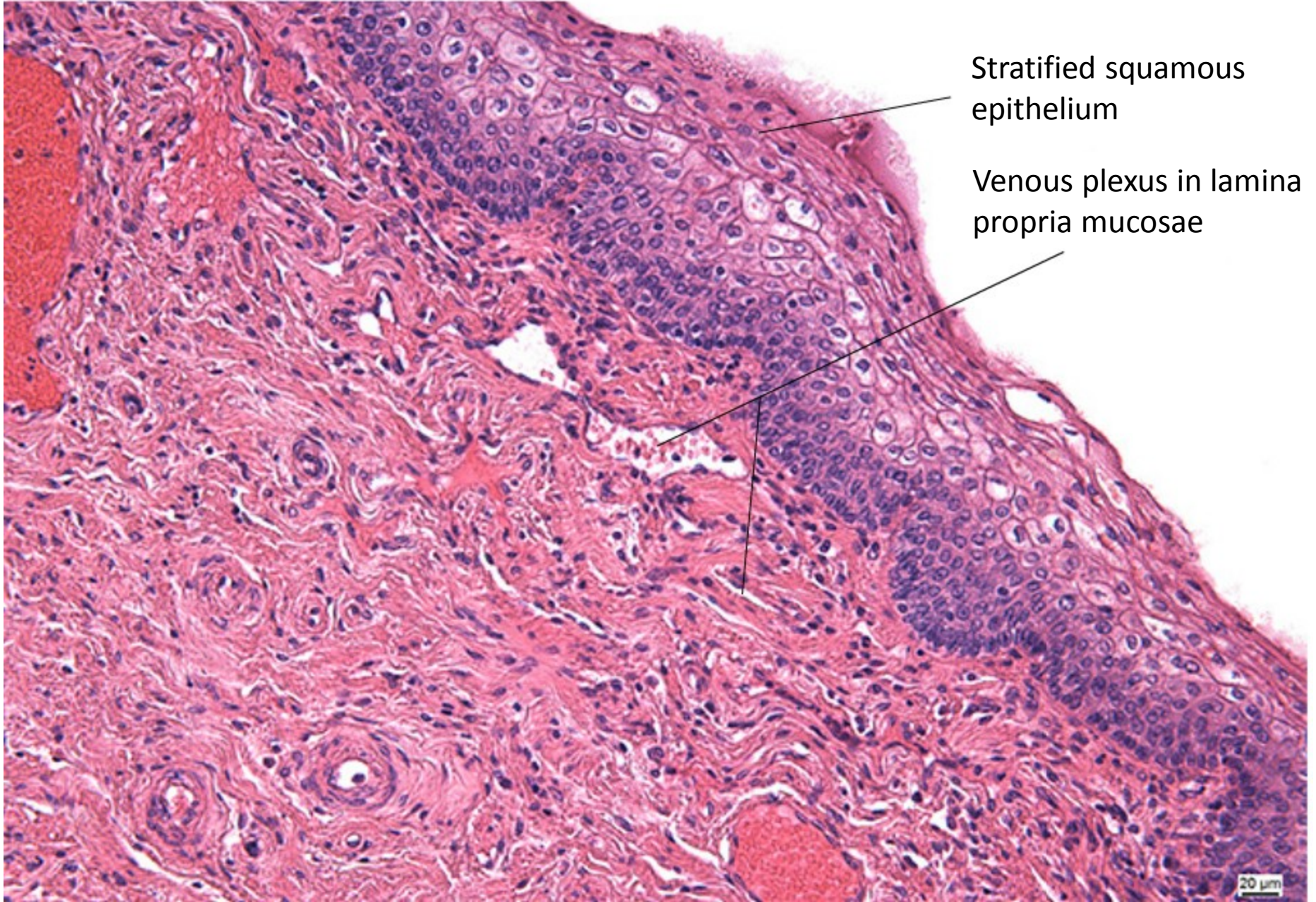
Vesica urinaria – tunica mucosa, (HE), objektiv 20×



Urethra feminina (HE)



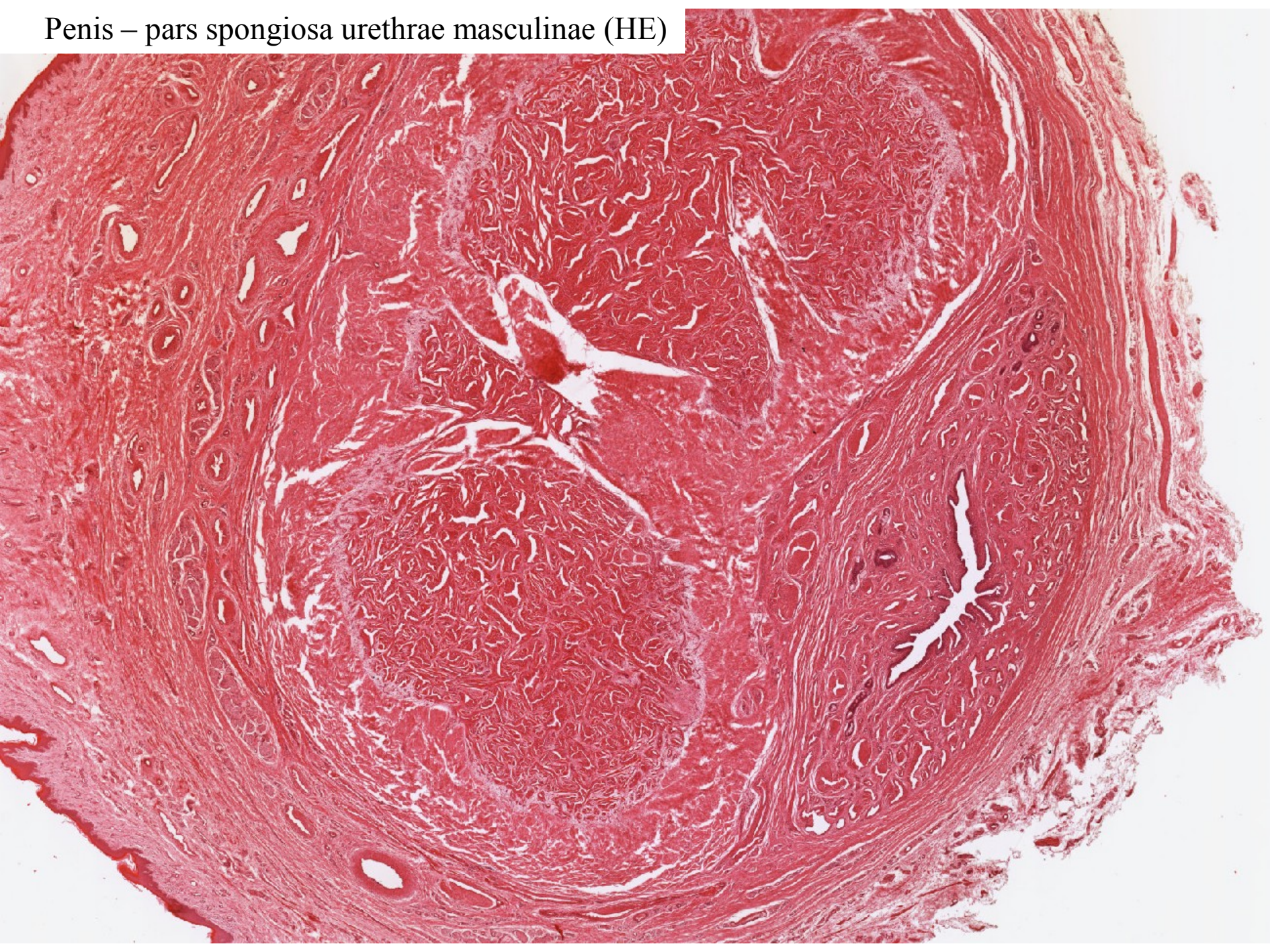
Urethra feminina – tunica mucosa, (HE), objektiv 20×



Stratified squamous epithelium

Venous plexus in lamina propria mucosae

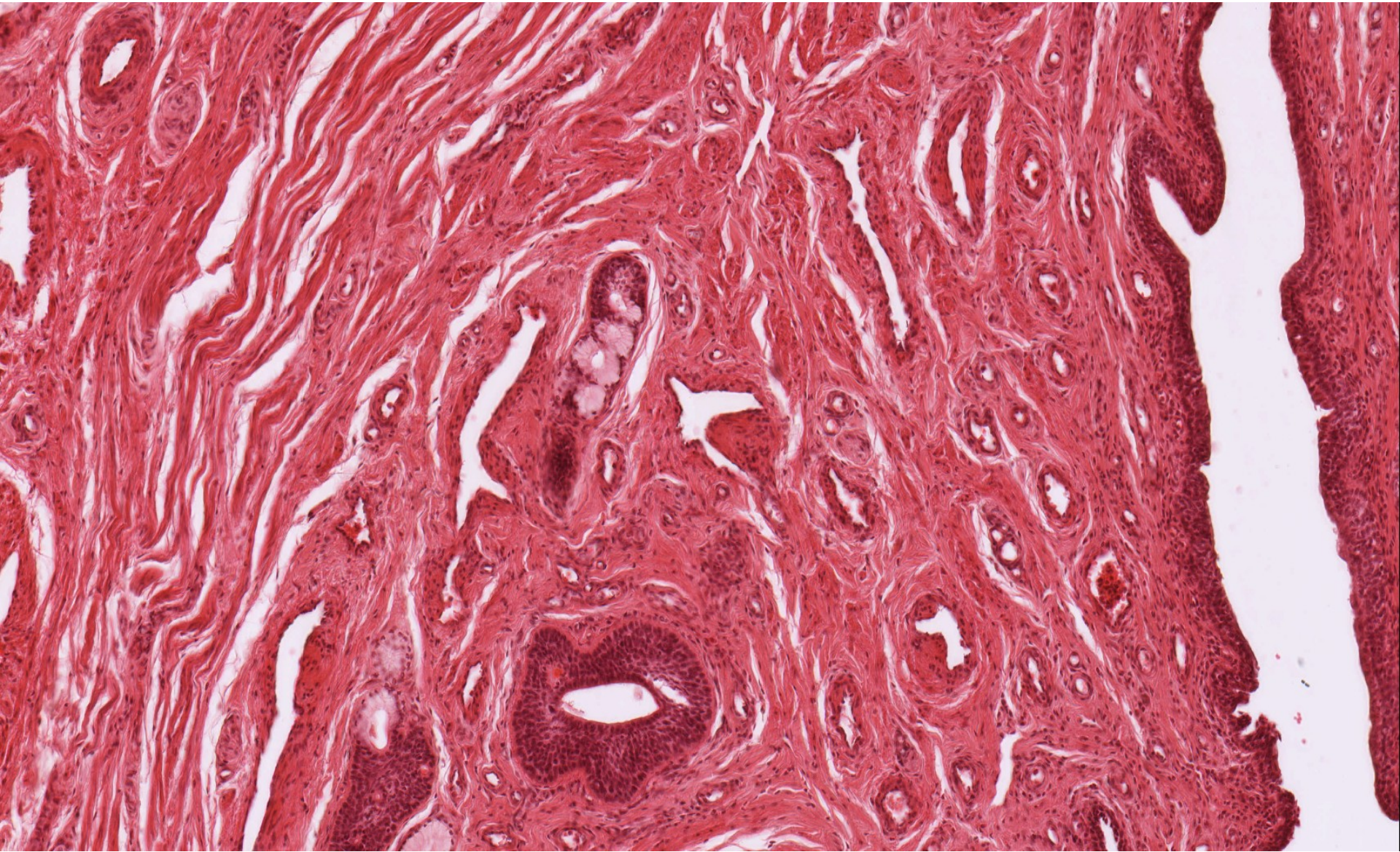
Penis – pars spongiosa urethrae masculinae (HE)



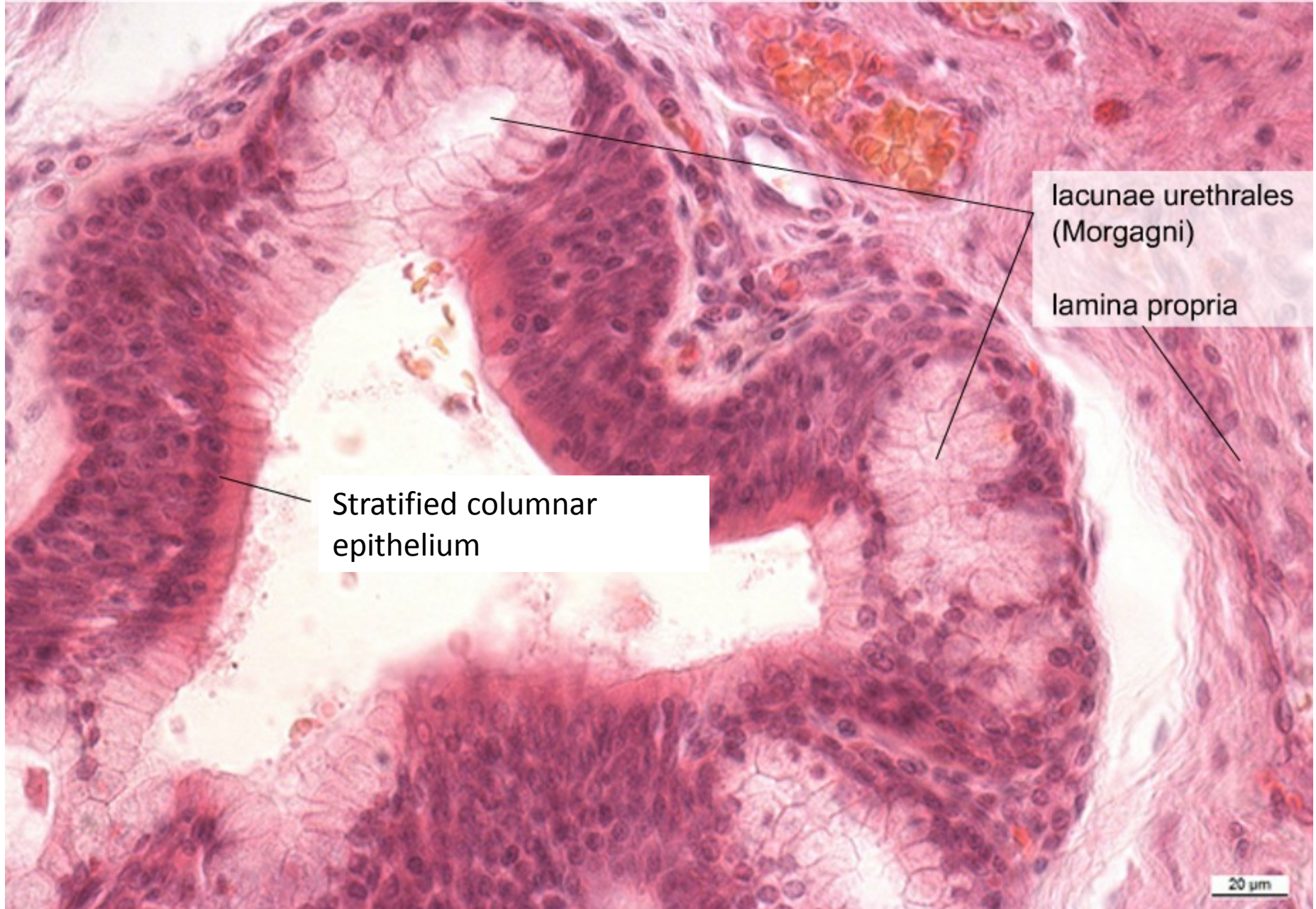
Urethra masculina – přehled, glandulae paraurethrales, (HE), objektiv 2,5×



Penis – pars spongiosa urethrae masculinae (HE)



Urethra masculina – lacunae urethrales, (HE), objektiv 40×



lacunae urethrales
(Morgagni)

lamina propria

Stratified columnar
epithelium

20 μm

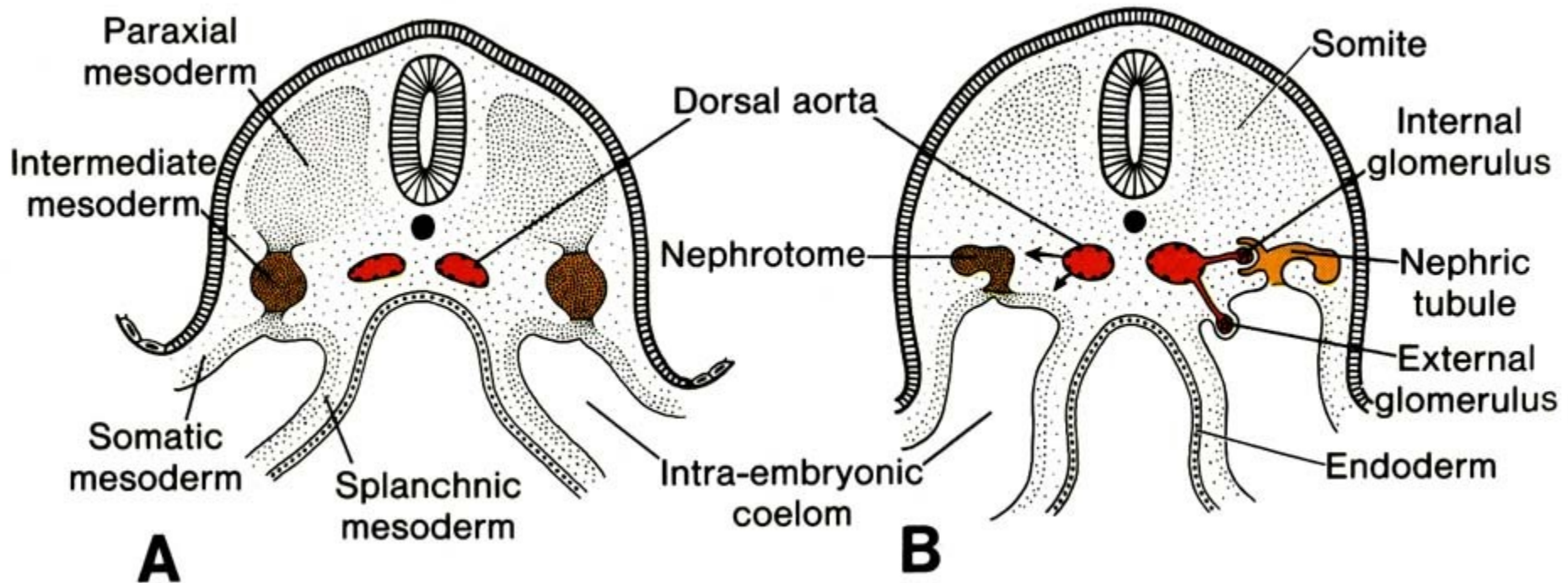
URINARY SYSTEM

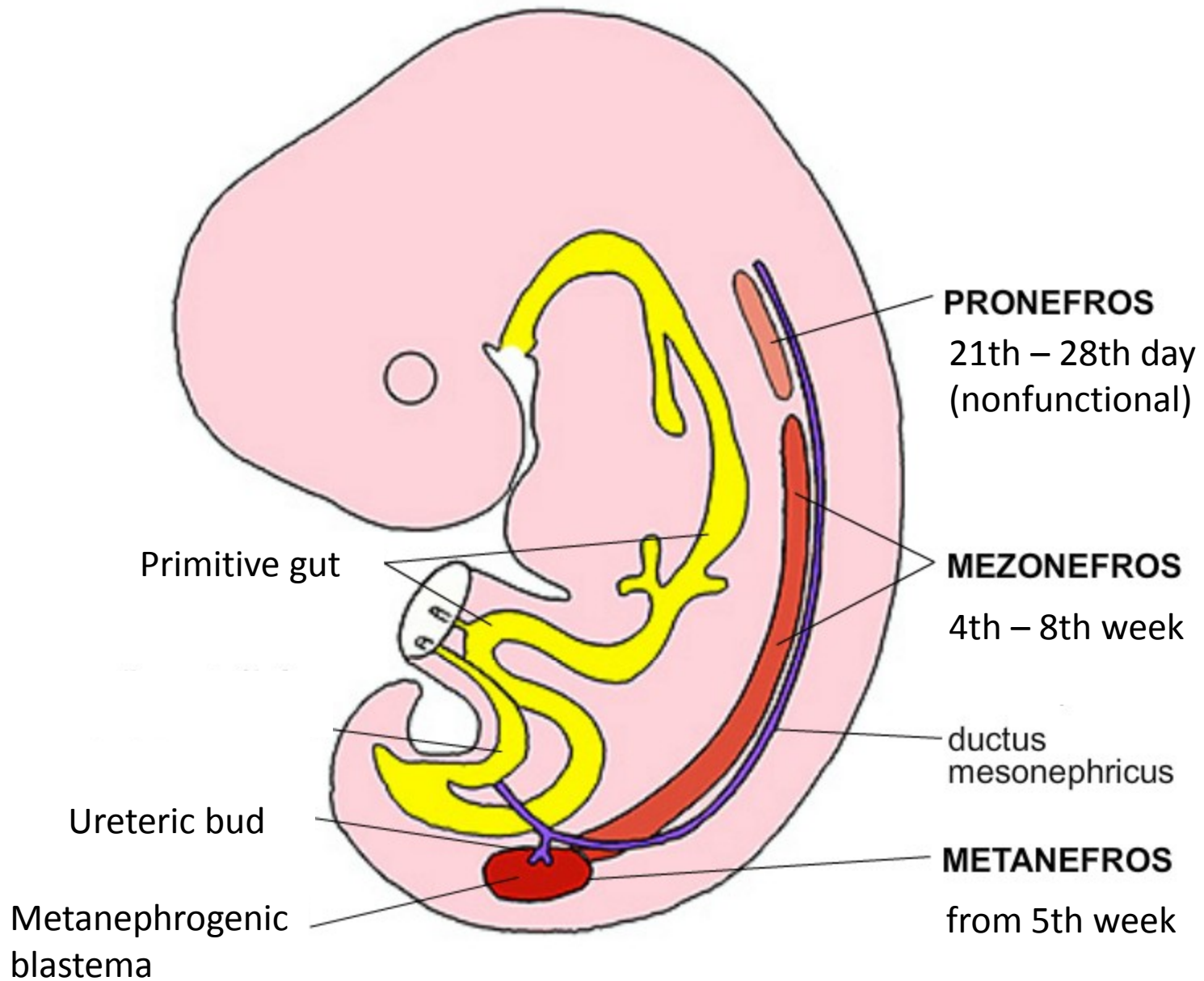
Slides:

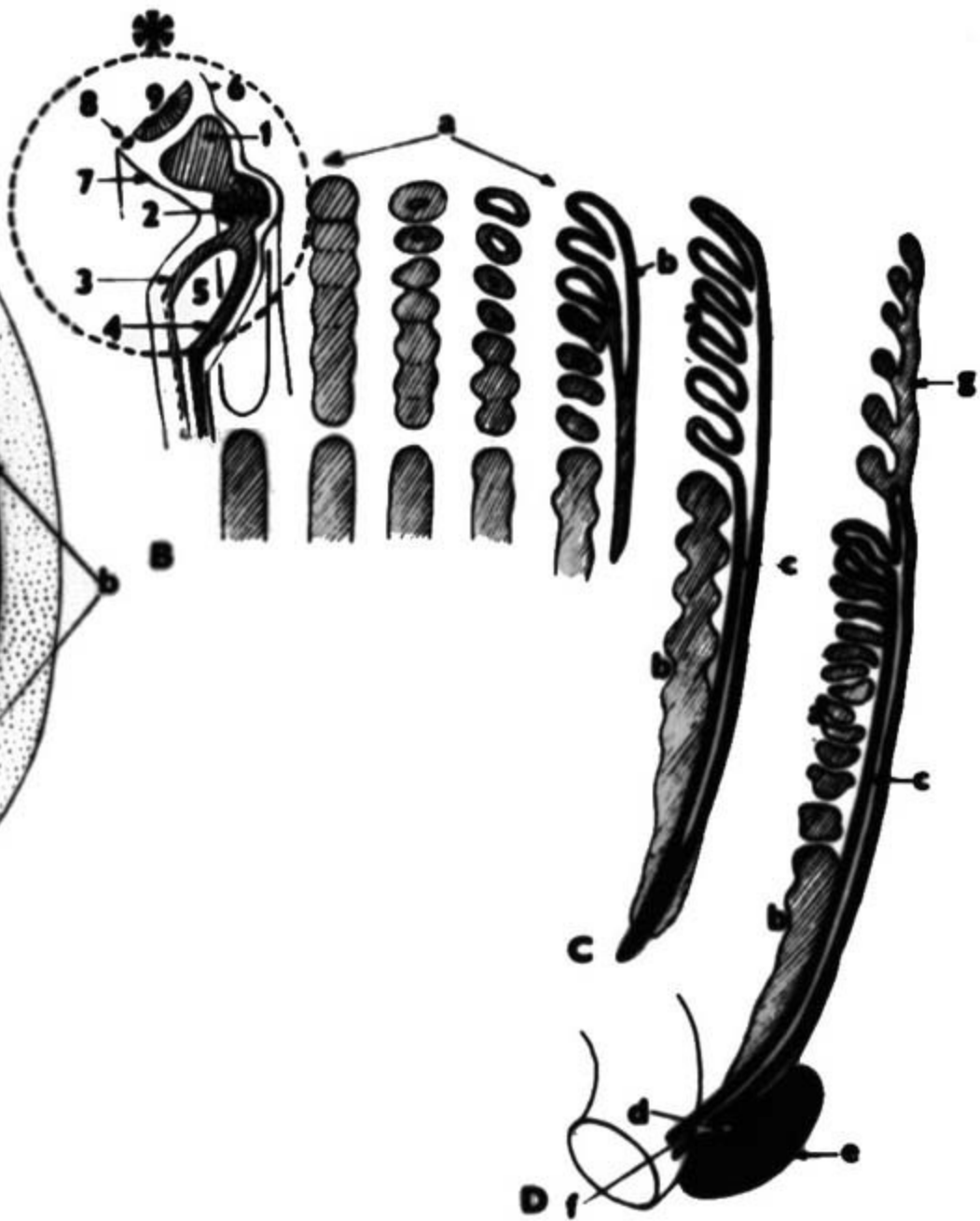
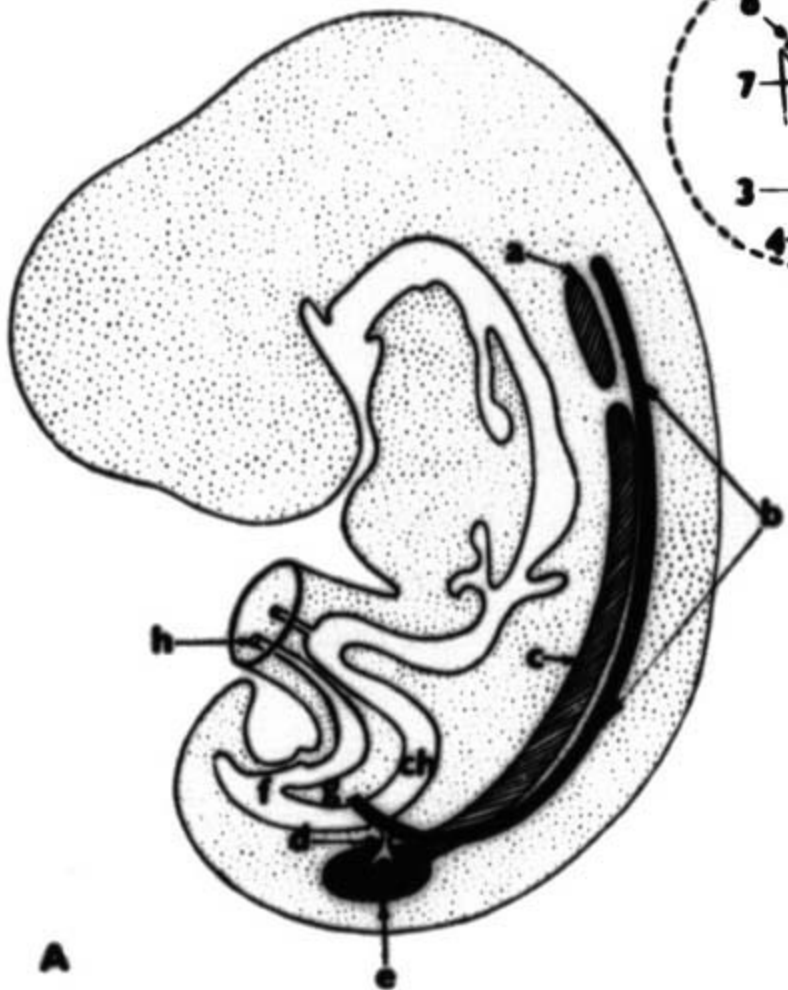
- 30. Ren (HE)
- 31. Ren (Weigert – van Gieson)
- 32. Calyx renalis (HE)
- 33. Ureter (HE)
- 34. Vesica urinaria (HE)
- 35. Urethra feminina (HE)
- 41. Penis – pars spongiosa urethrae masculinae (HE)

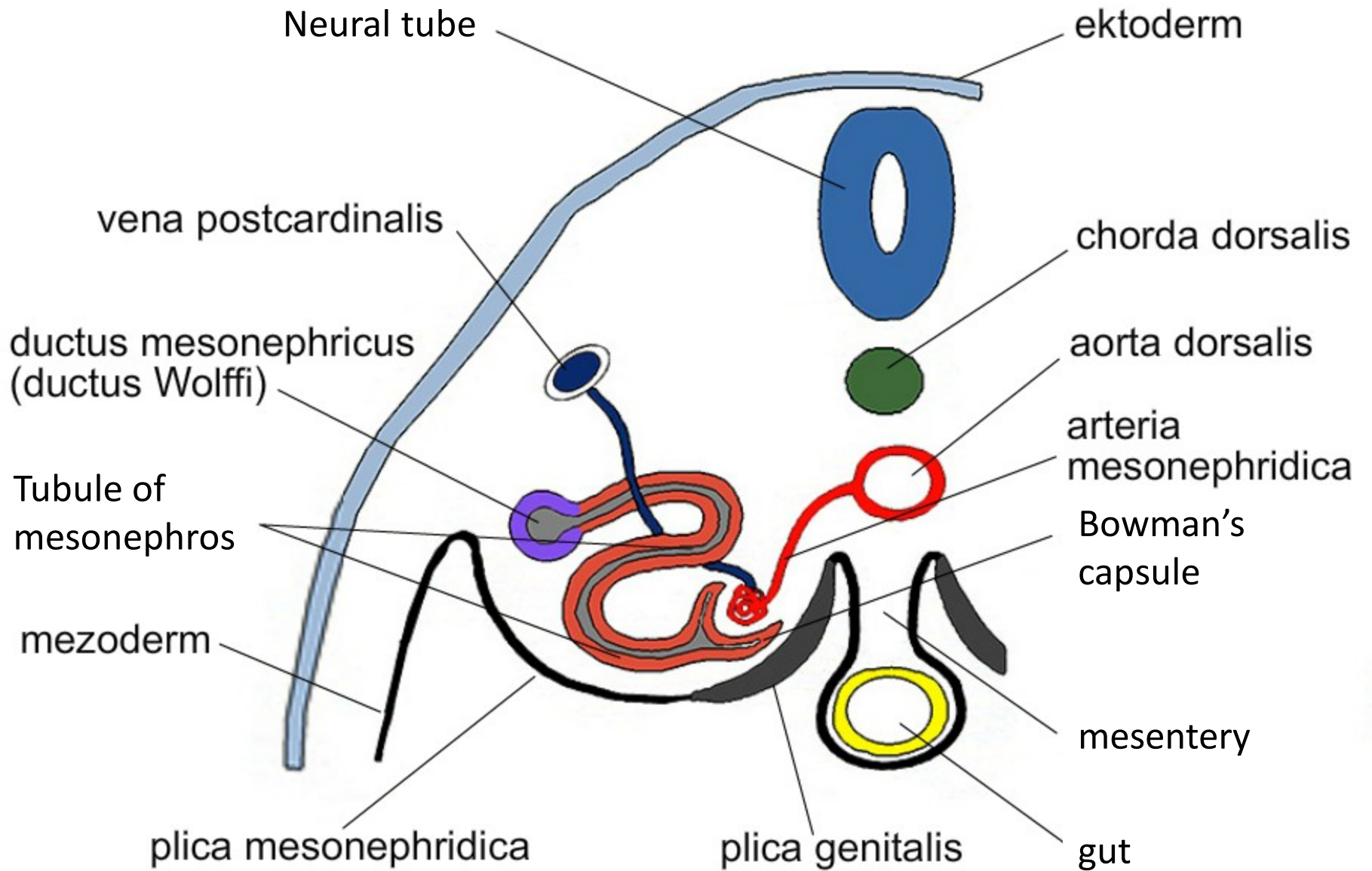
Atlas EM: basal labyrinth (49)

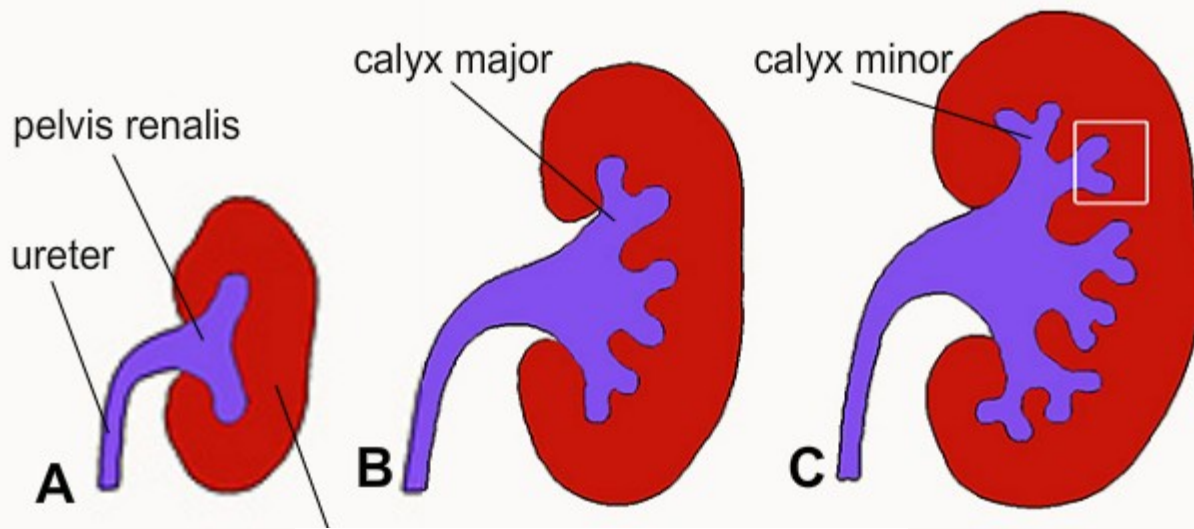
Development of urinary system



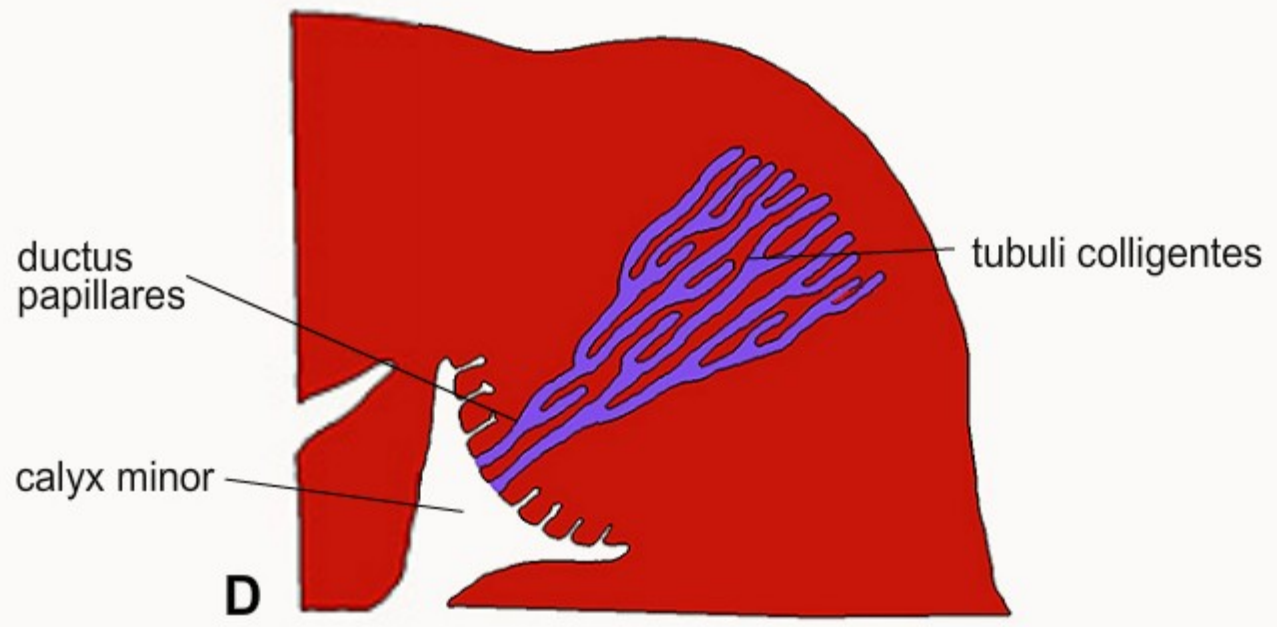








Metanephrogenic blastema



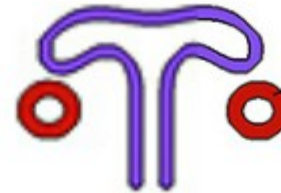
Metanephrogenic
blastema

Collecting
tubule

A



B



Renal
corpuscle

Tubule of
nephron

C



D



glomerulus

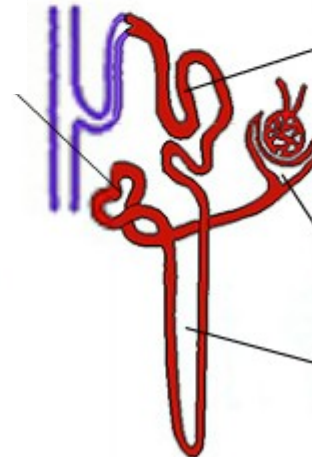
Loop of
Henle

E



Proximal
tubule

F



Distal
tubule

Bowman's
capsule

Loop of
Henle

