

# Mužský pohlavní systém

Ústav histologie a embryologie  
LF Masarykova univerzita

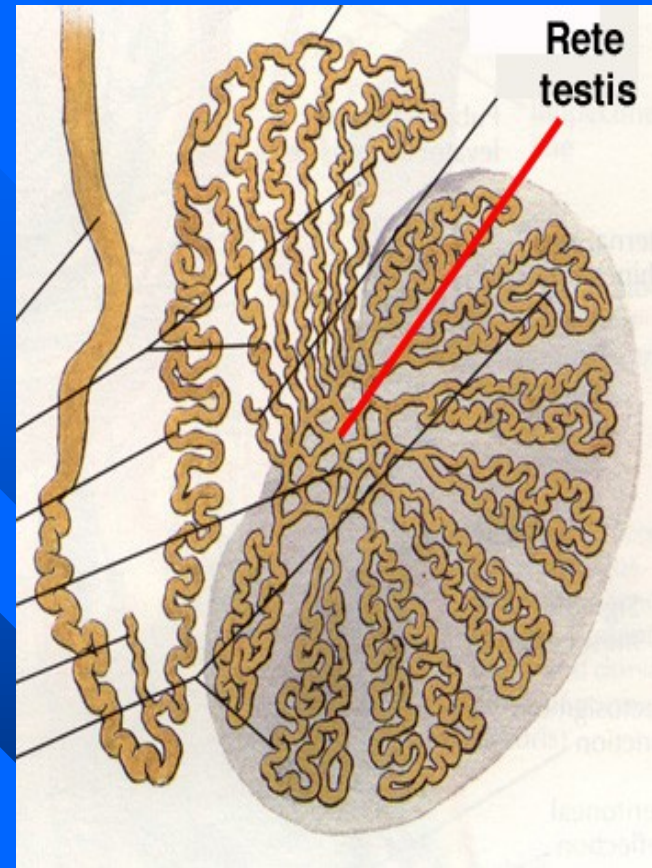
# Mužský pohlavní systém

- Varlata
- Vývodní pohlavní cesty
- Přídavné žlázy
- Pyj
- Šourek

# Varle - testis, orchis

## Vazivo

- **tunica albuginea testis**  
= husté kolag. vazivo
- **mediastinum testis**  
+ **rete testis** (vývodné cesty)
- **septula testis**  
– lobuli testis (cca 250)
- **intersticiální vazivo**  
– řídké kolagenní,  
obklopuje **tubuli seminiferi contorti** (parenchym)  
- obsahuje cévy, nervy a **Leydigovy buňky** (*testosteron*)



## Parenchym

- **tubuli seminiferi contorti**
- ústí do **tubuli recti** (počátek vývodních cest) a ty do **rete testis**

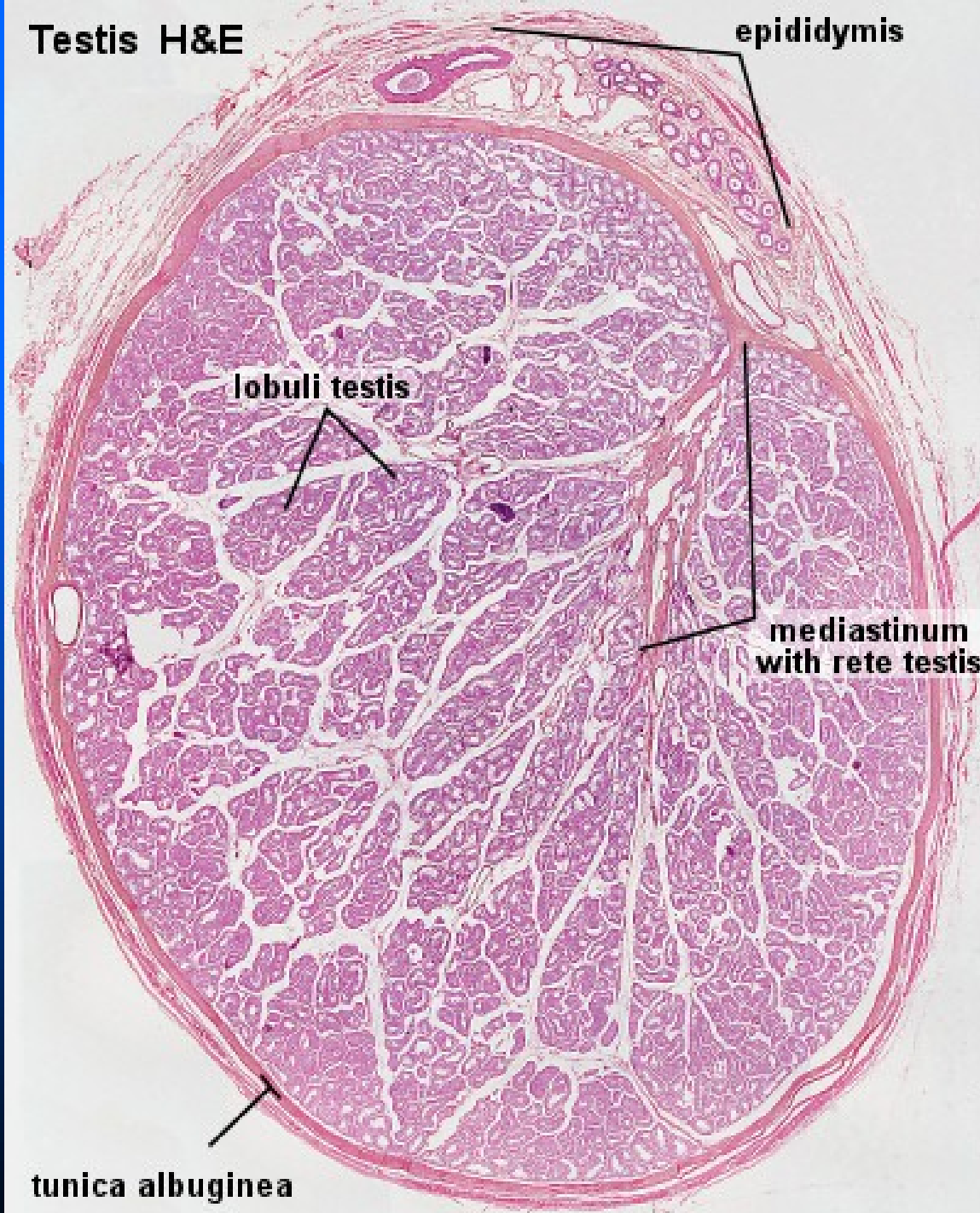
**Testis H&E**

**epididymis**

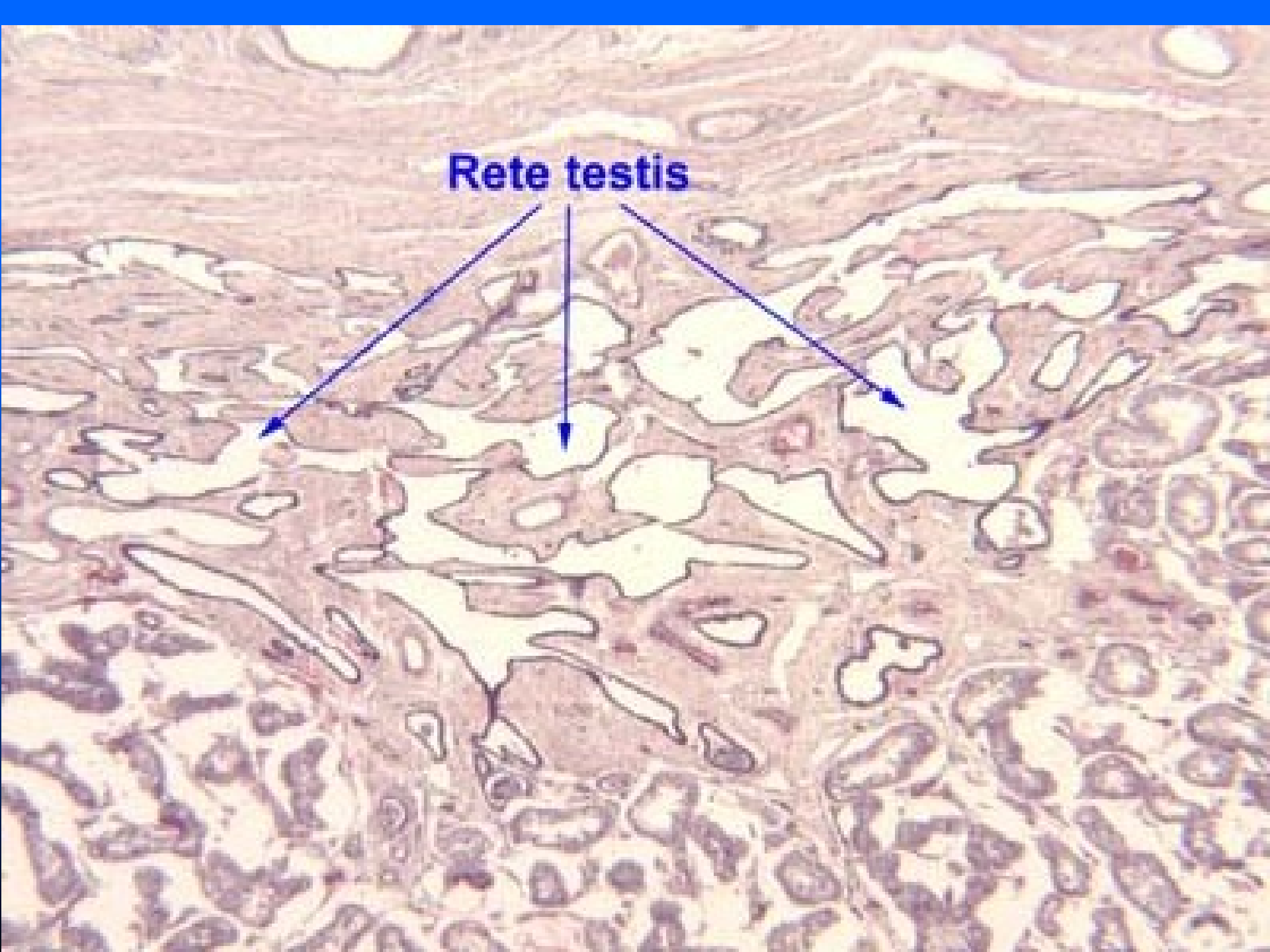
**lobuli testis**

**mediastinum  
with rete testis**

**tunica albuginea**

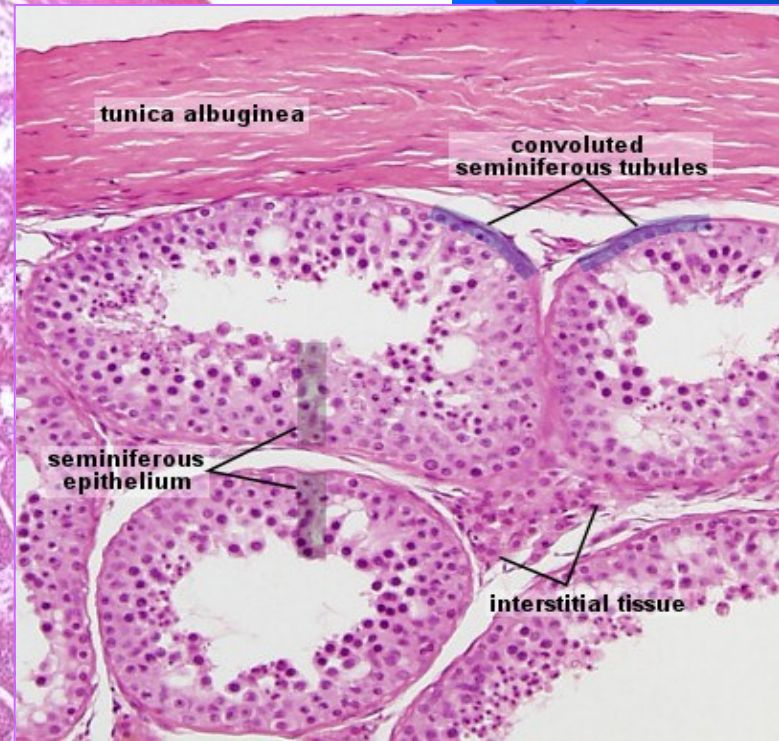


**Rete testis**



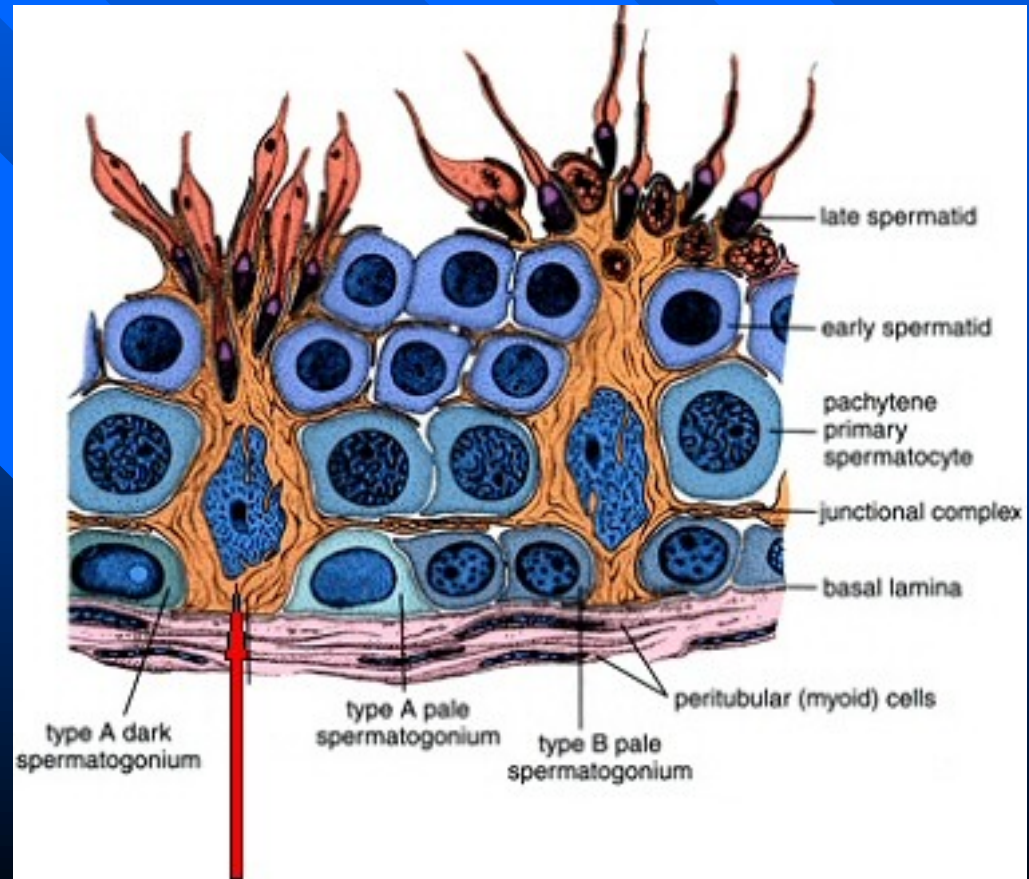


# Tubuli seminiferi contorti



# Stočené semenotvorné kanálky

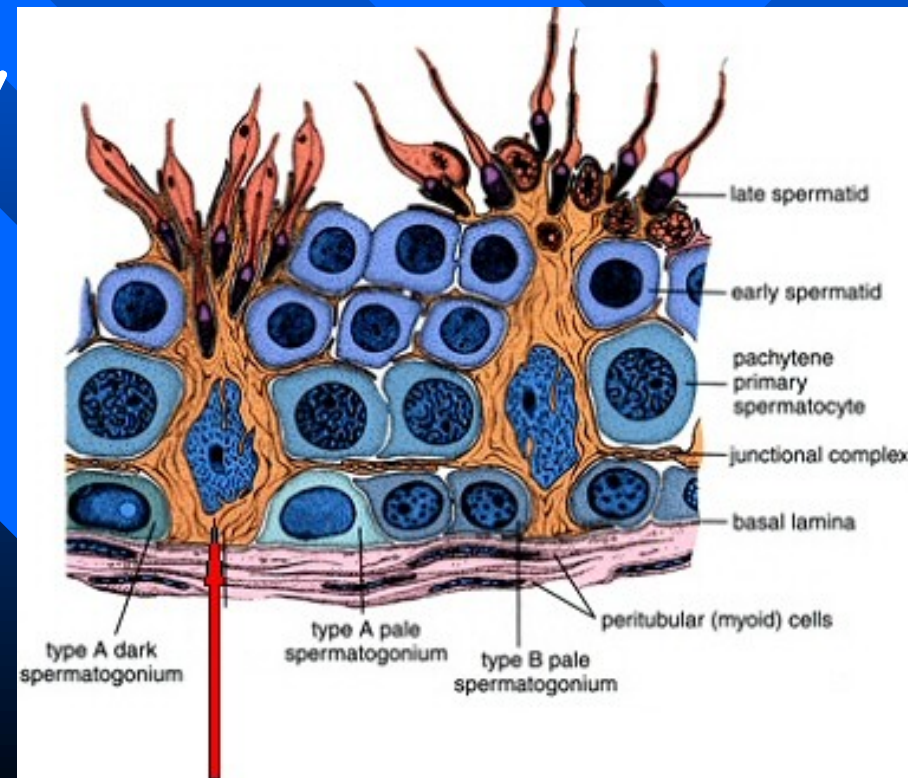
- Tubuli seminiferi contorti
- Membrana propria
- Lamina basalis
- Zárodečný epitel  
**Sertoliho bb.**  
Semenné bb.



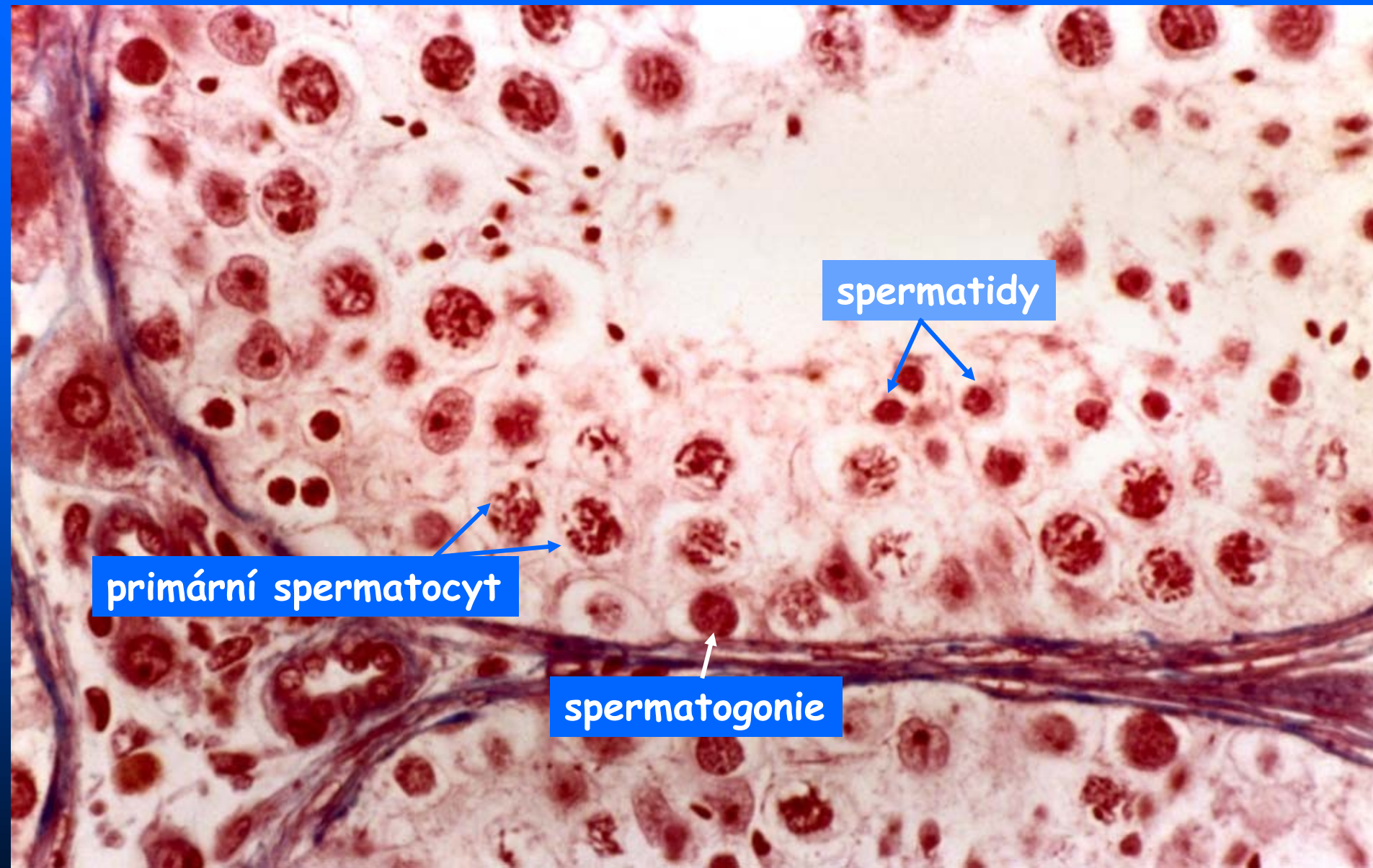


# Semenné buňky

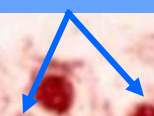
- Spermatogonie → mitóza  
spermatogonie A → mitóza  
spermatogonie B → meióza
  - Primární spermatocyty
  - Sekundární spermatocyty
  - Spermaticidy
- +
- Sertoliho bb.



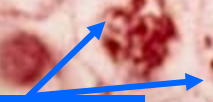




spermatidy



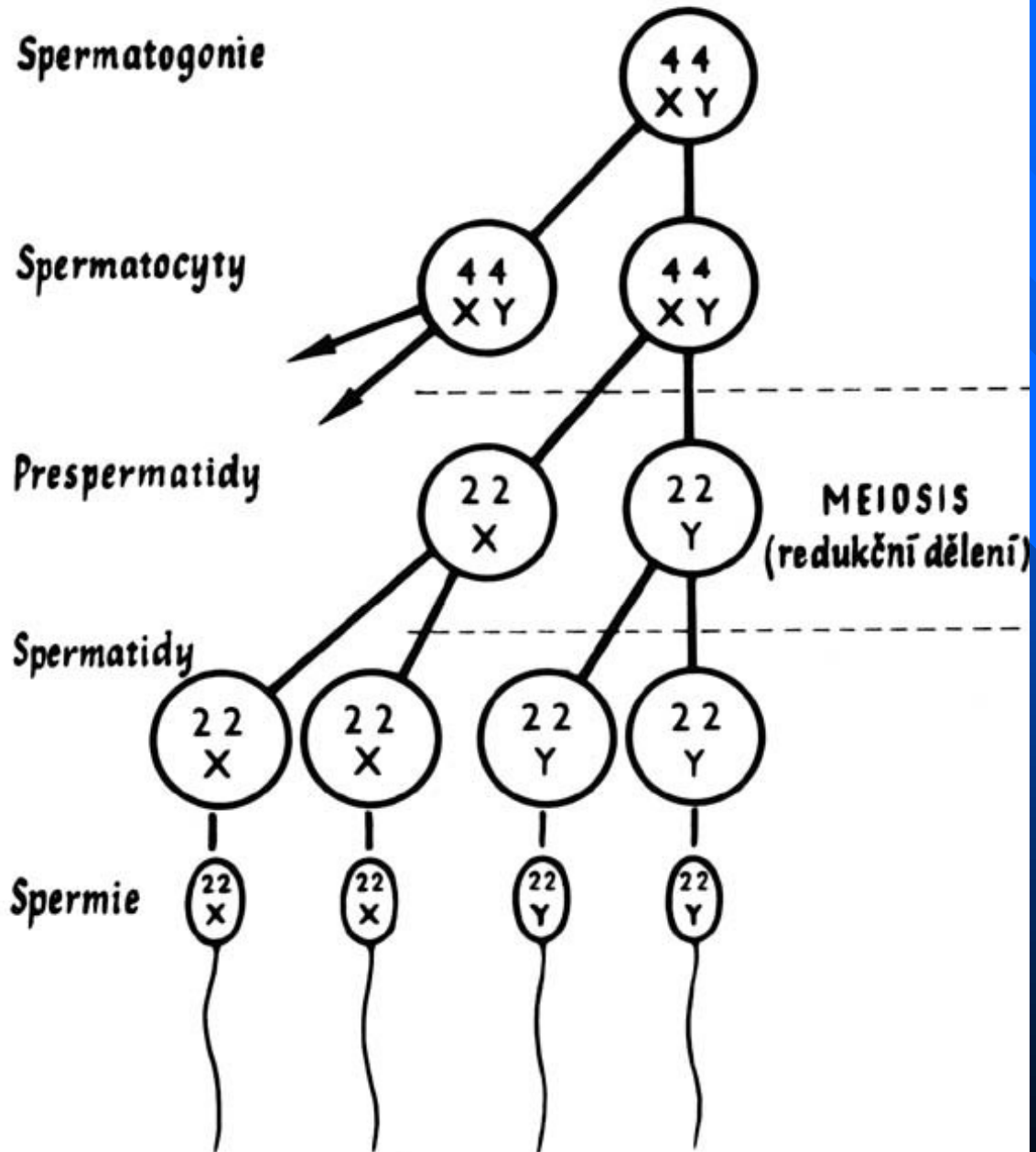
primární spermatocyt



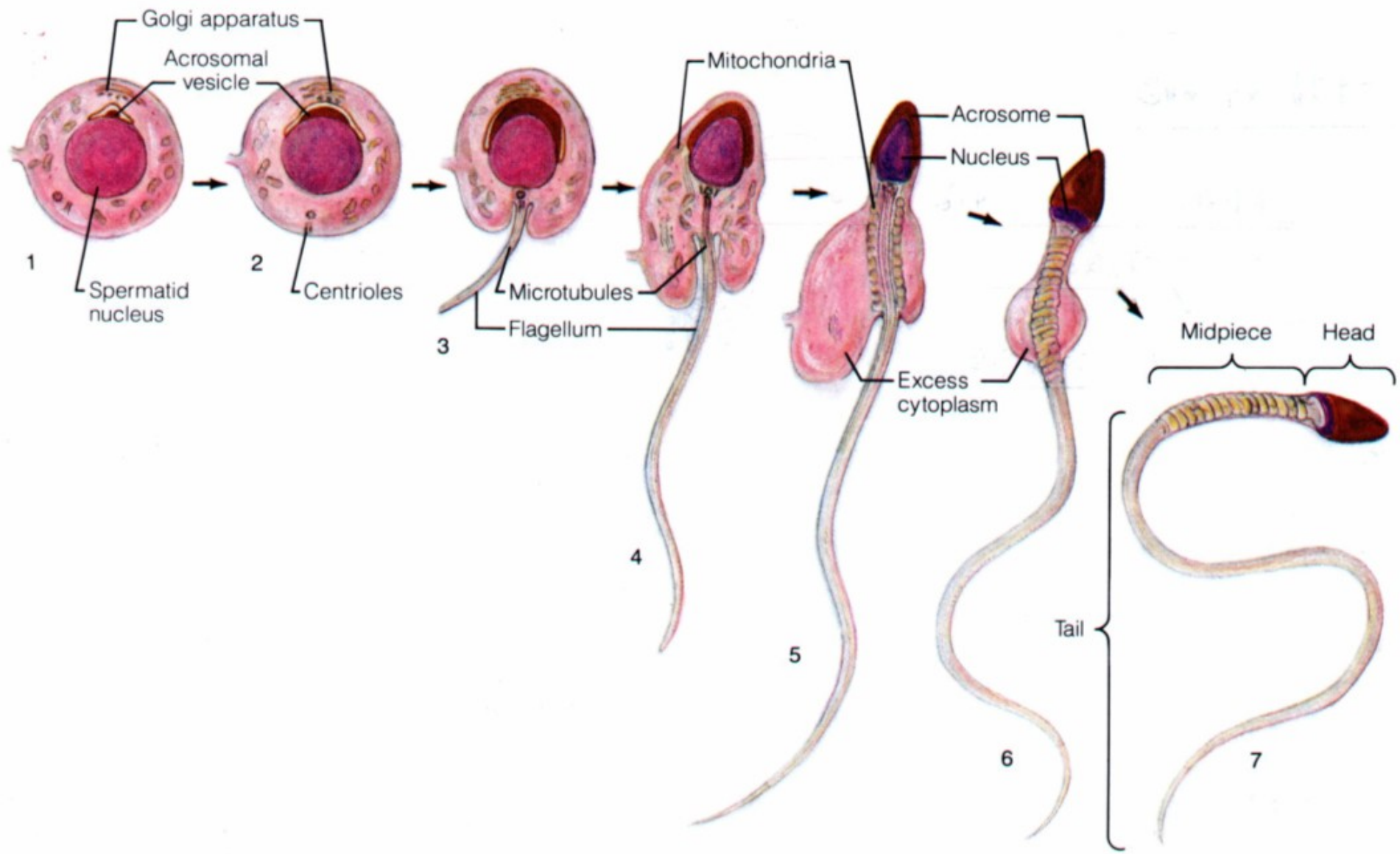
spermatogonie



# SPERMATOGENEZE



# Spermiogeneze – probíhá v nadvarleti





# Intersticiální vazivo varlete

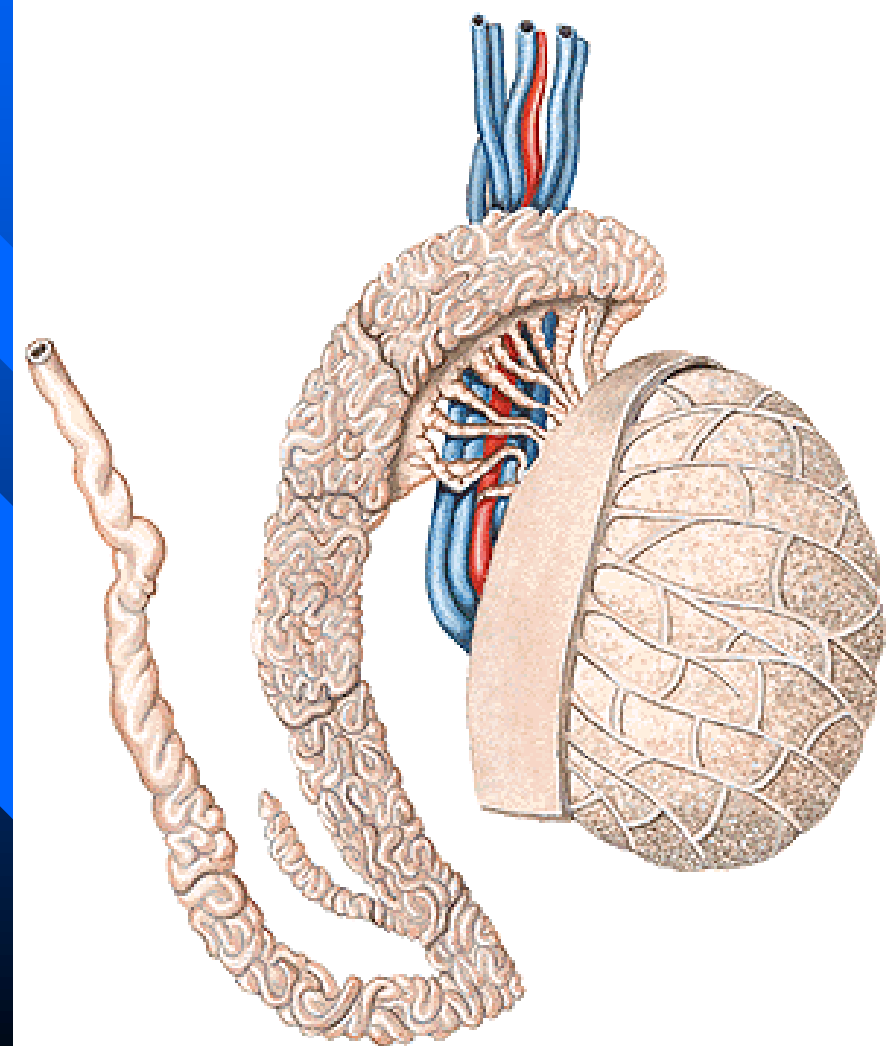


Leydigovy buňky



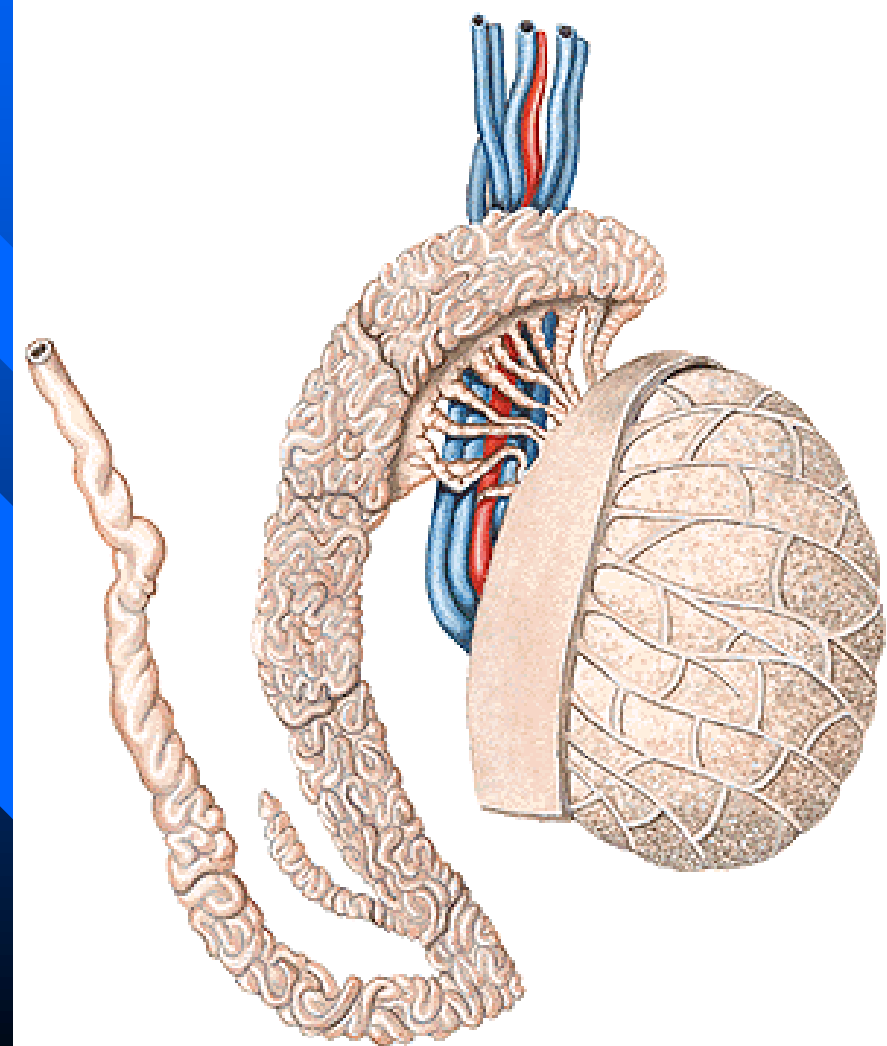
# Vývodní pohlavní cesty

- Ductuli efferentes
- Ductus epididymidis  
i – i – y – i – i
- Ductus deferens
- Ductus ejaculatorius



# Nadvarle

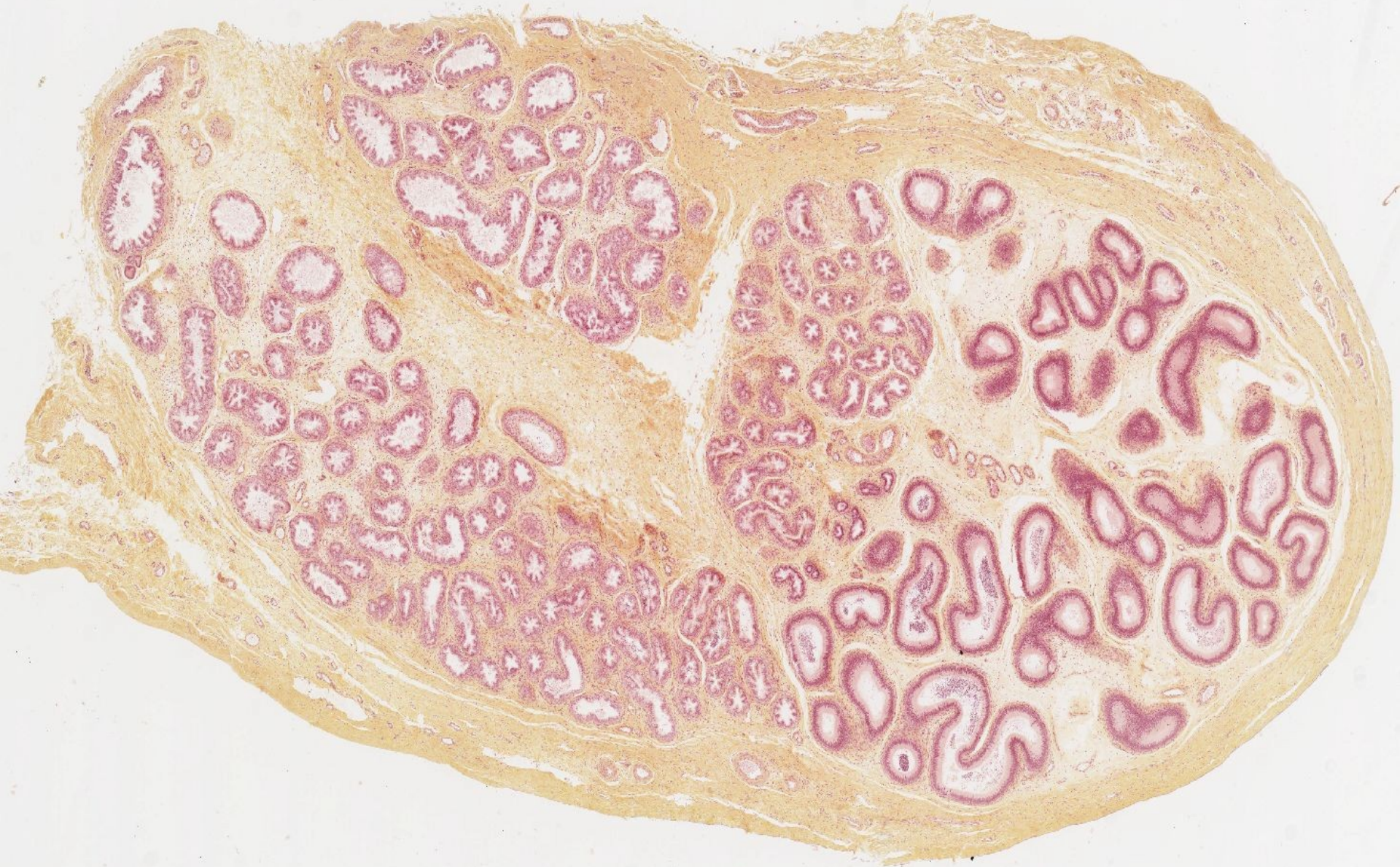
- Hlava, tělo, ohon
- Obal
- Septa
- **Ductuli efferentes**
- **Ductus epididymidis**



Ductuli efferentes

Nadvarle

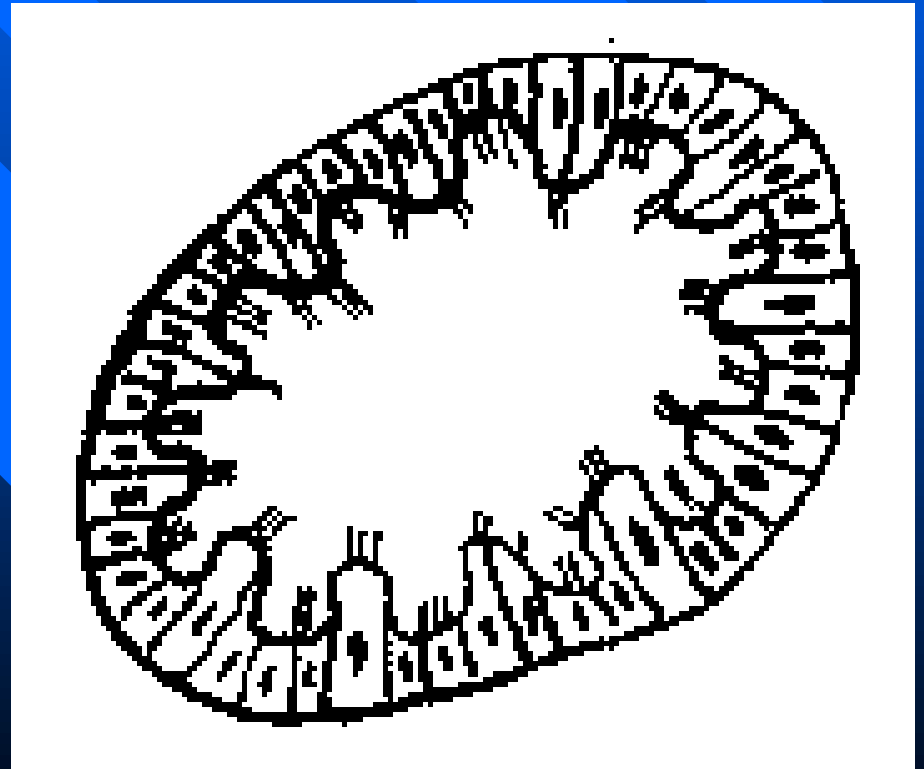
Ductus epididymidis





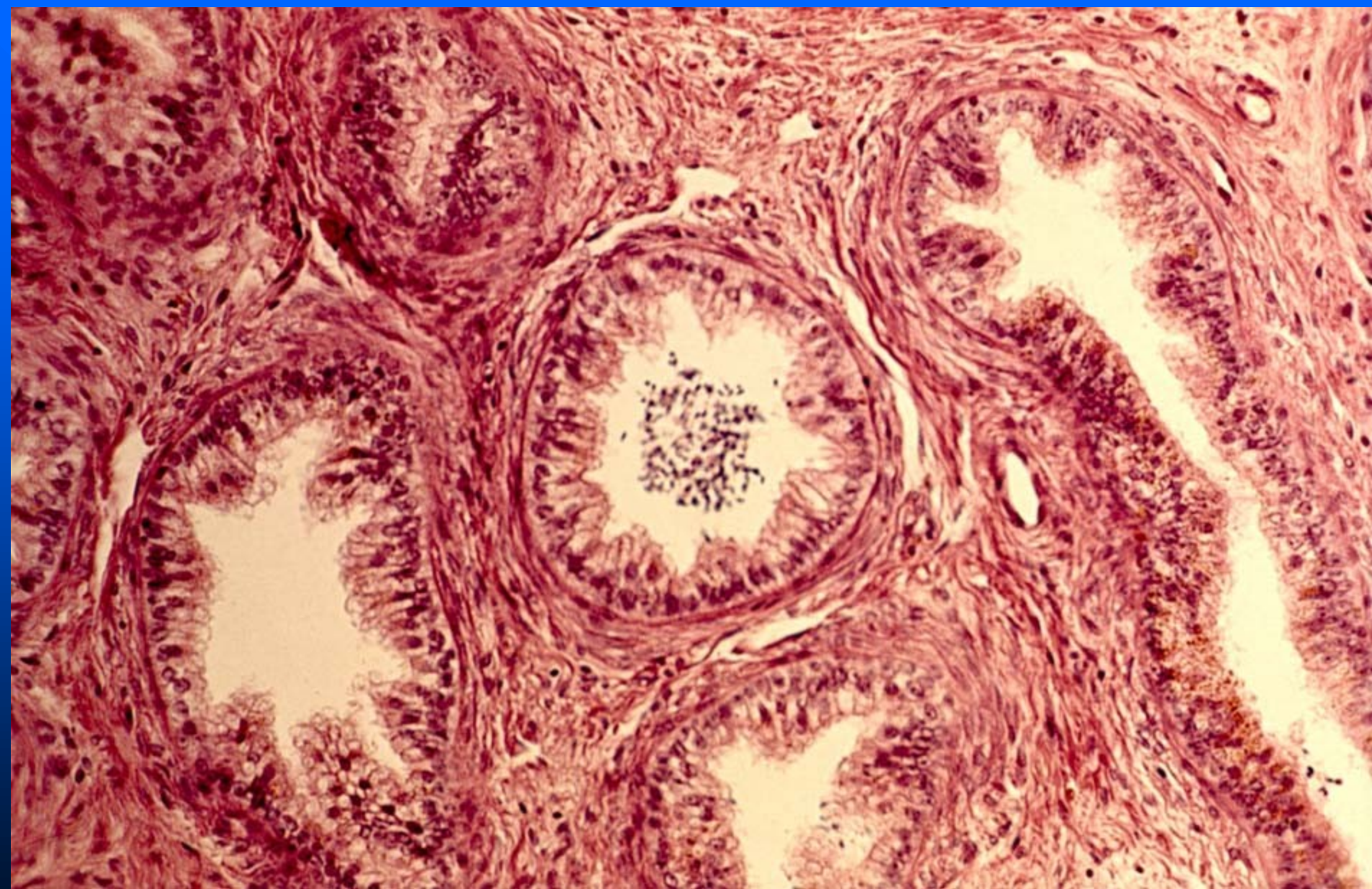
# Ductuli efferentes – odvodné kanálky

- Epitel: jednovstevný kubický až dvouřadý cylindrický (část bb. + kinocilie!!, část bb. + mikrovilky !!)
- Bazální membrána
- Lamina propria  
(+ hl. sv. bb.)



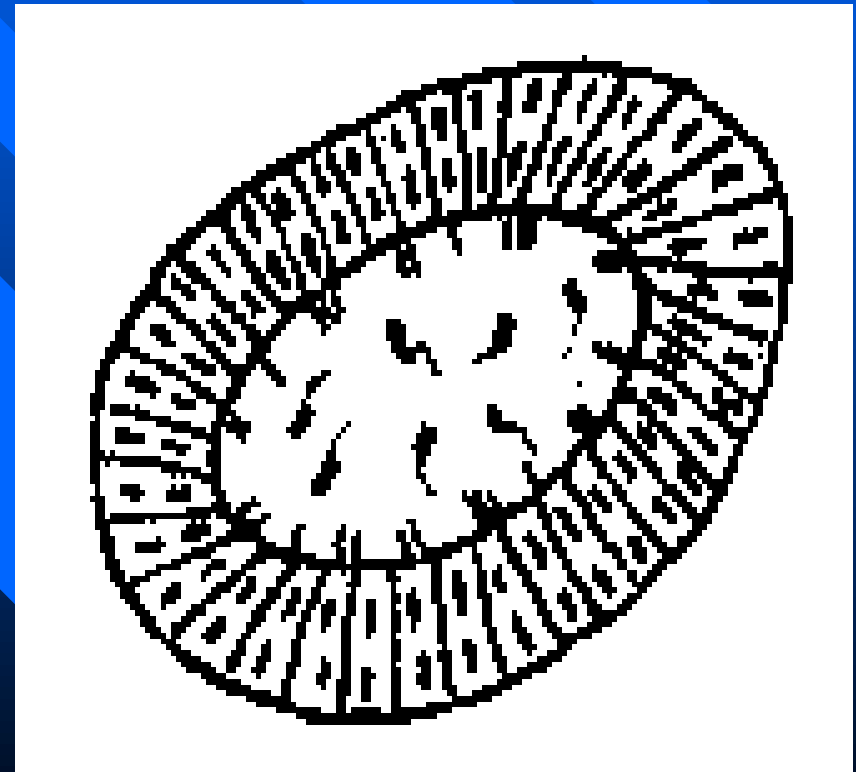


# Ductuli efferentes



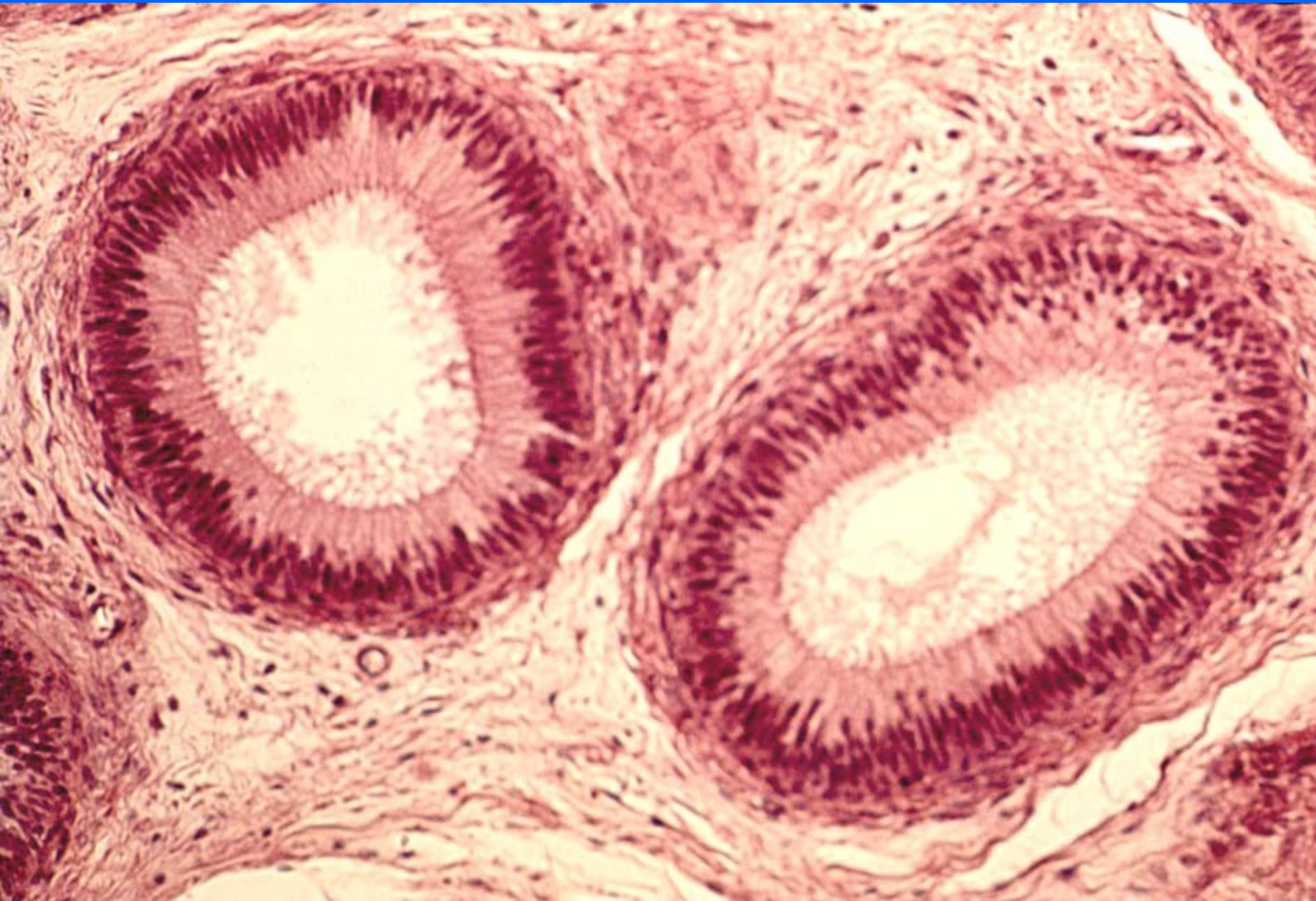
# Ductus epididymidis

- Epitel: dvouřadý cylindrický  
*hlavní bb.- cylindrické se stereociliemi !!!*  
*bazální bb.*
- Bazální membrána
- Lamina propria  
(+ hl. sv. bb.)

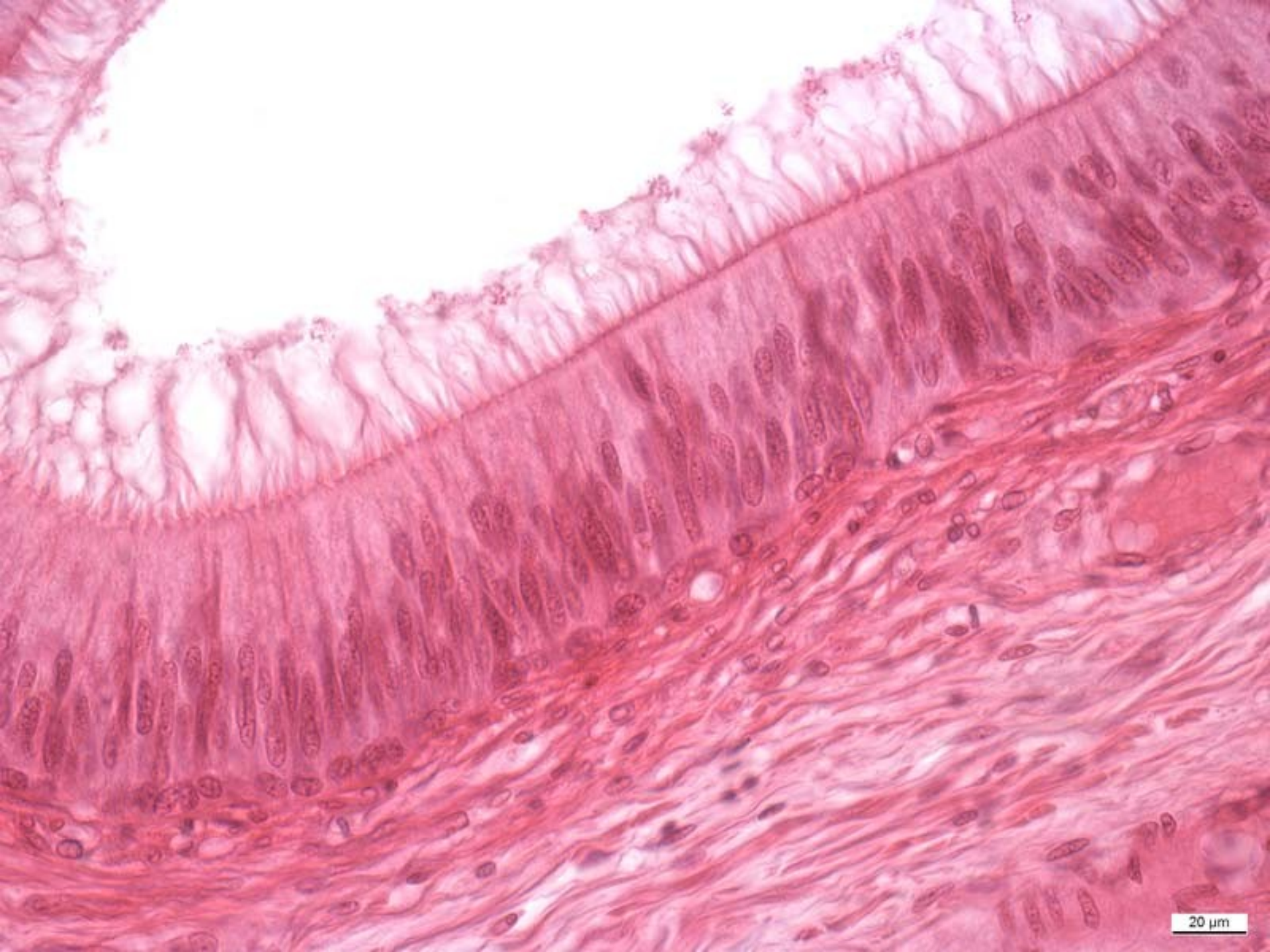




# Ductus epididymidis





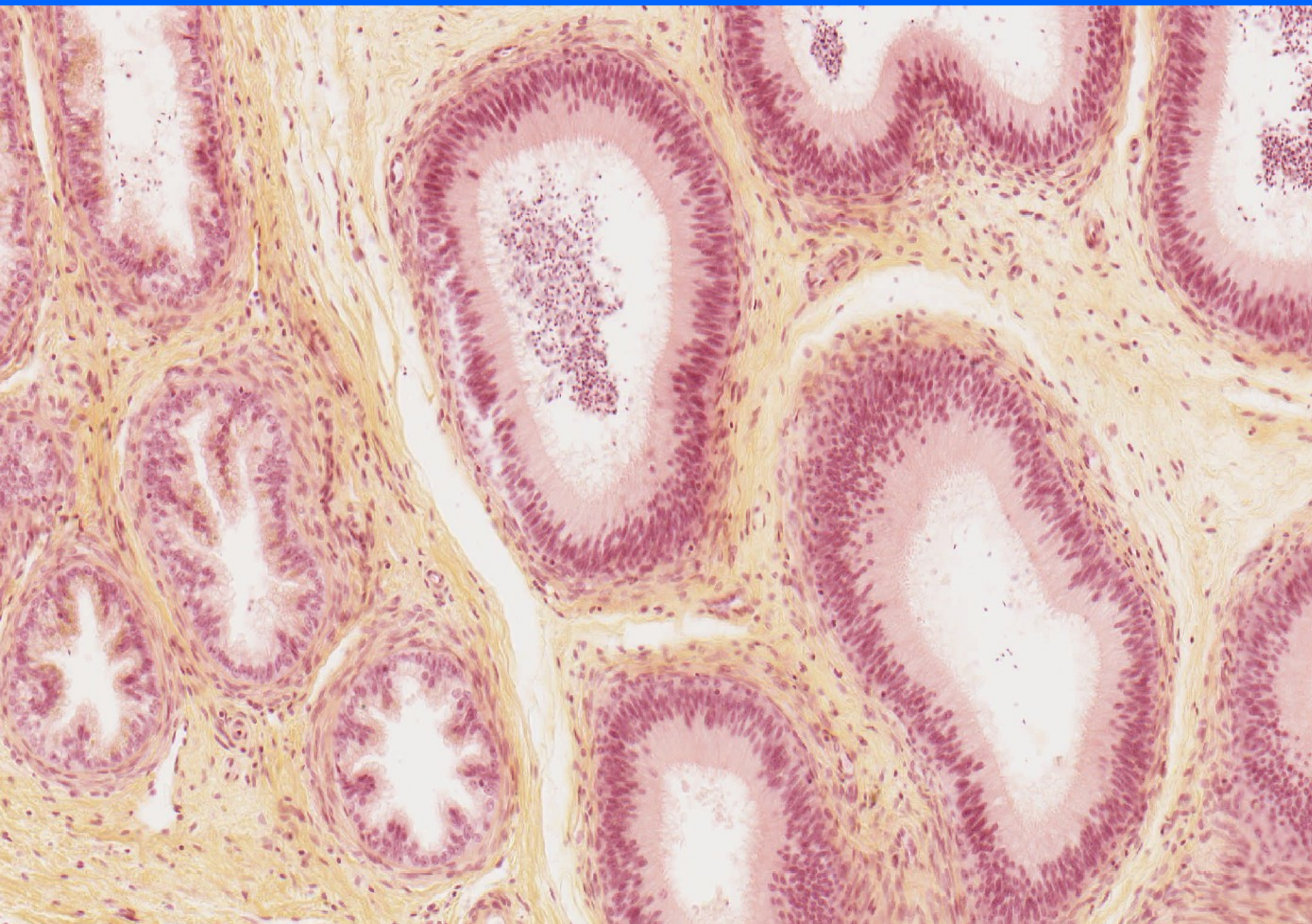


20  $\mu$ m



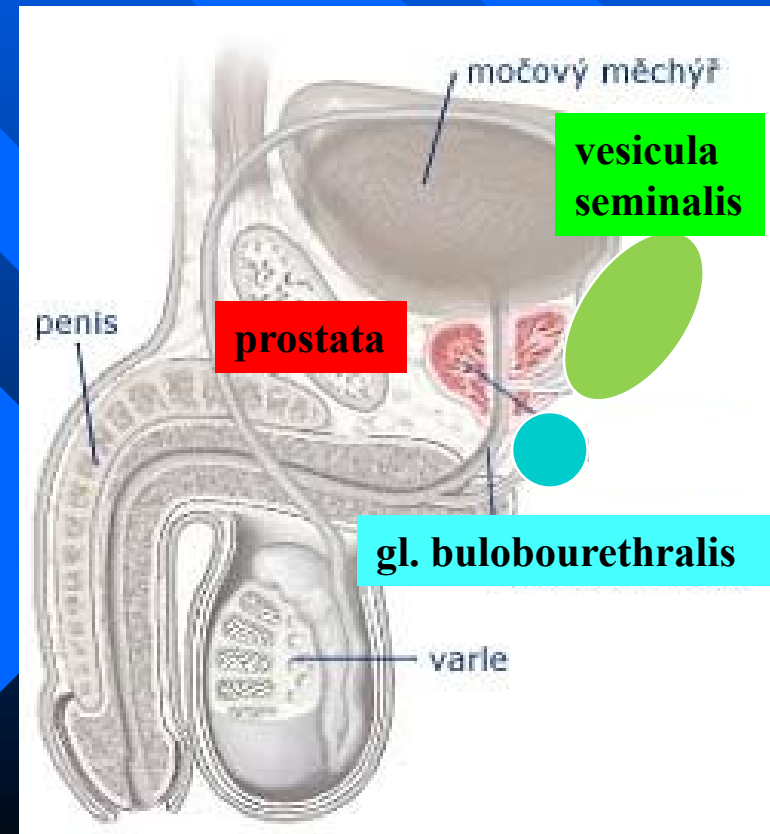
Ductuli efferentes

Ductus epididymidis



# Žlázy připojené na vývodní pohlavní cesty

- Vesicula seminalis
- Prostata
- Glandula bulbourethralis





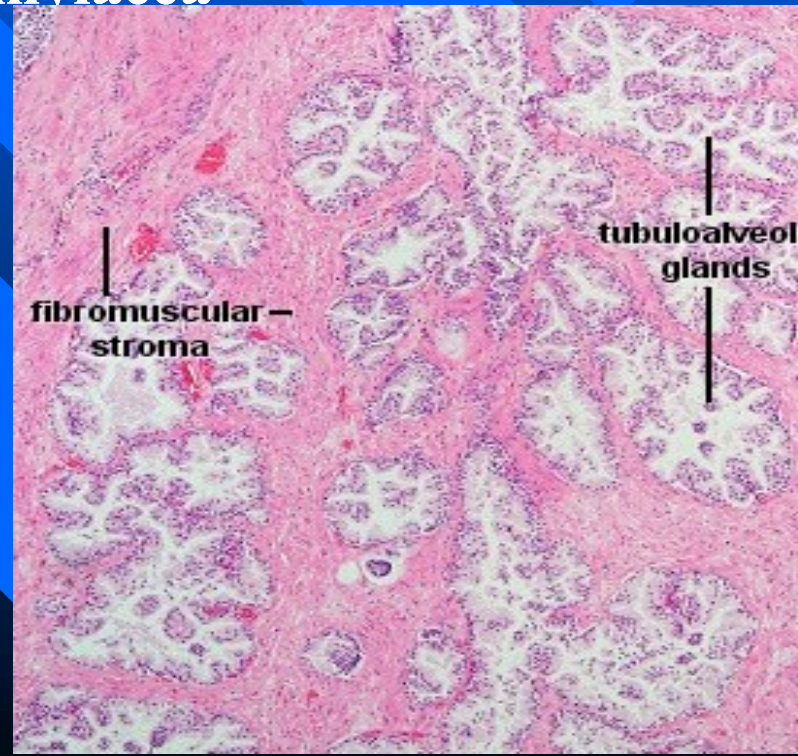
# Prostata

## ■ Prostatické žlázy

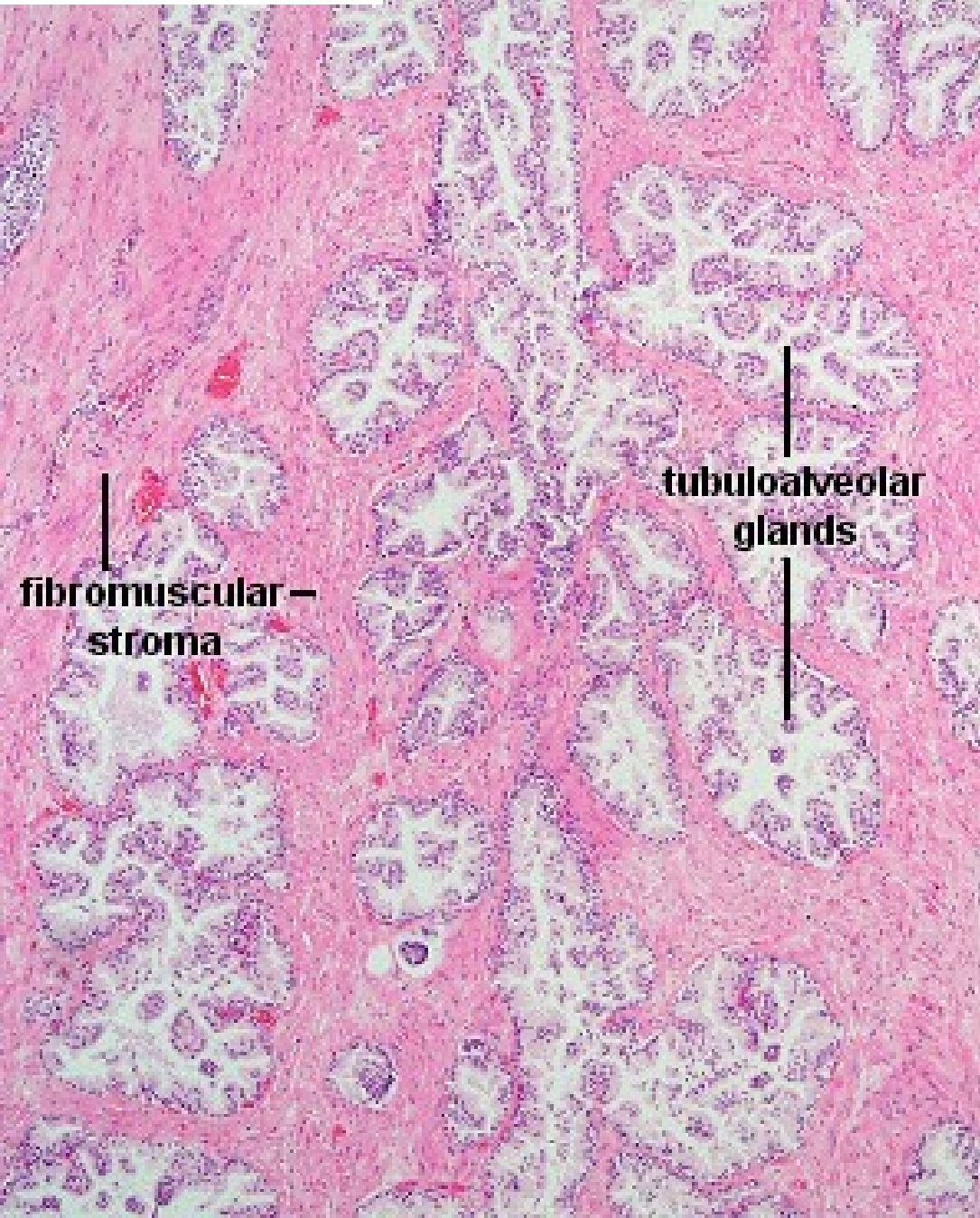
epitel – jednovrst.kubický – dvouřadý cyl., → nepravidelné lumen

*prostatické konkrementy* - corpora amylacea

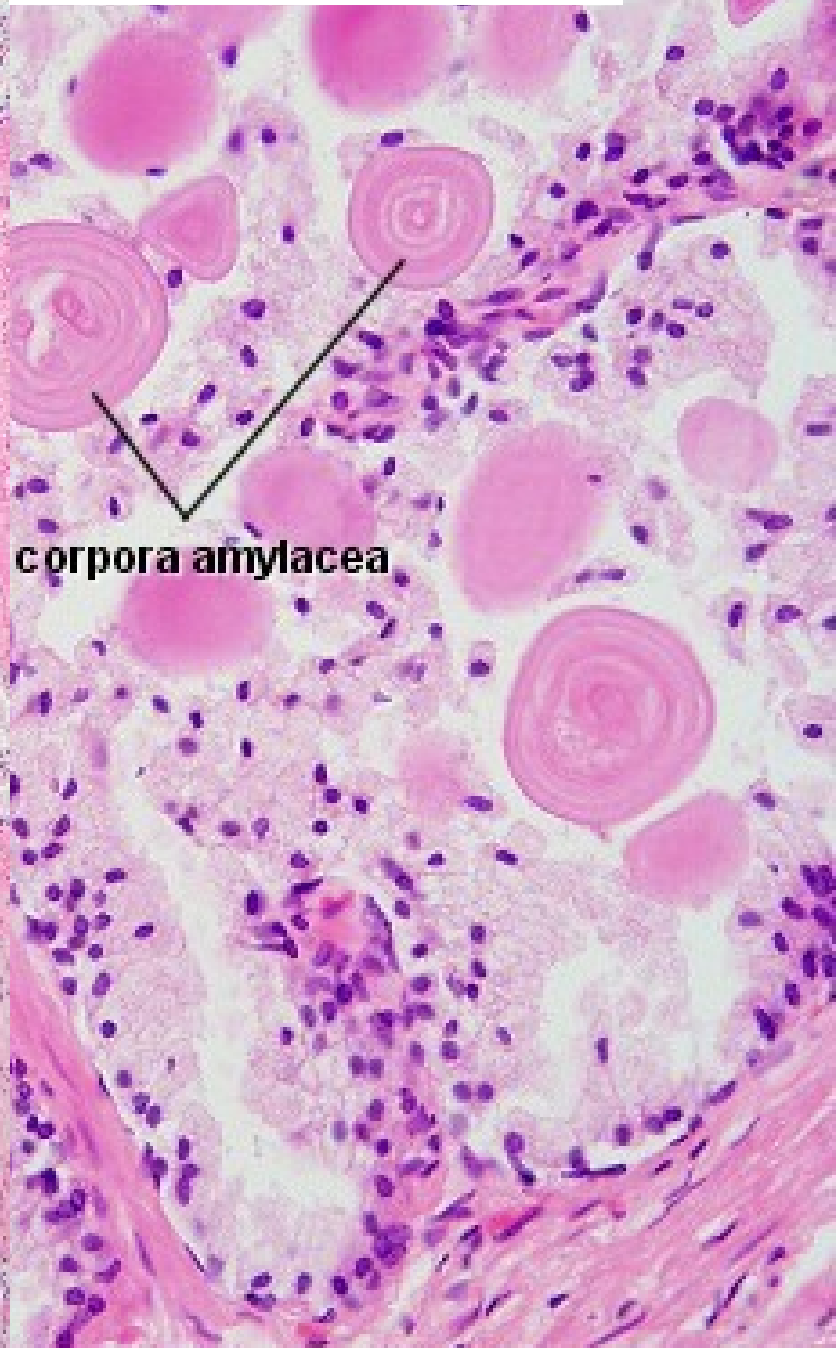
## ■ Fibromuskulární stroma



**Prostata HE**

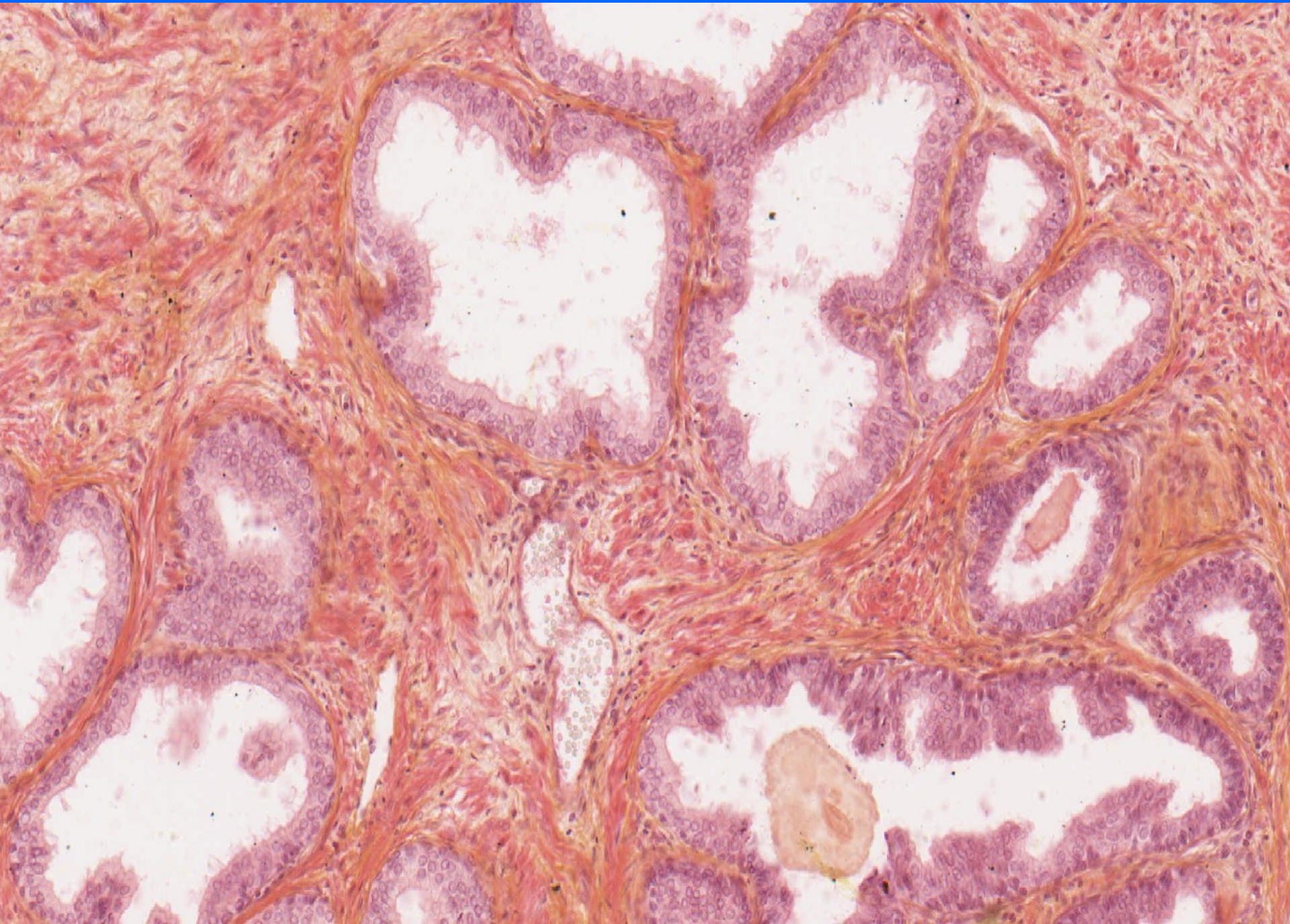


**Prostata HE -detail**



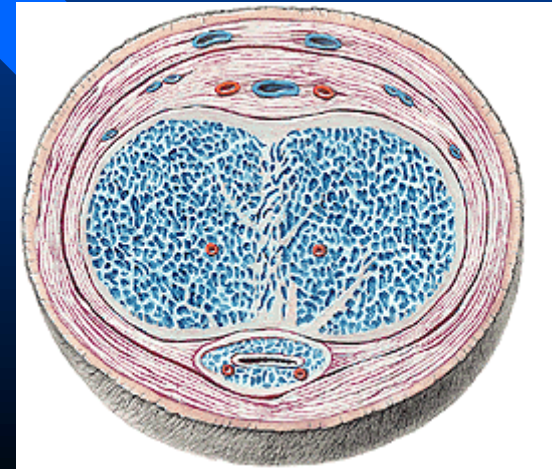


# Prostata (HEŠ)

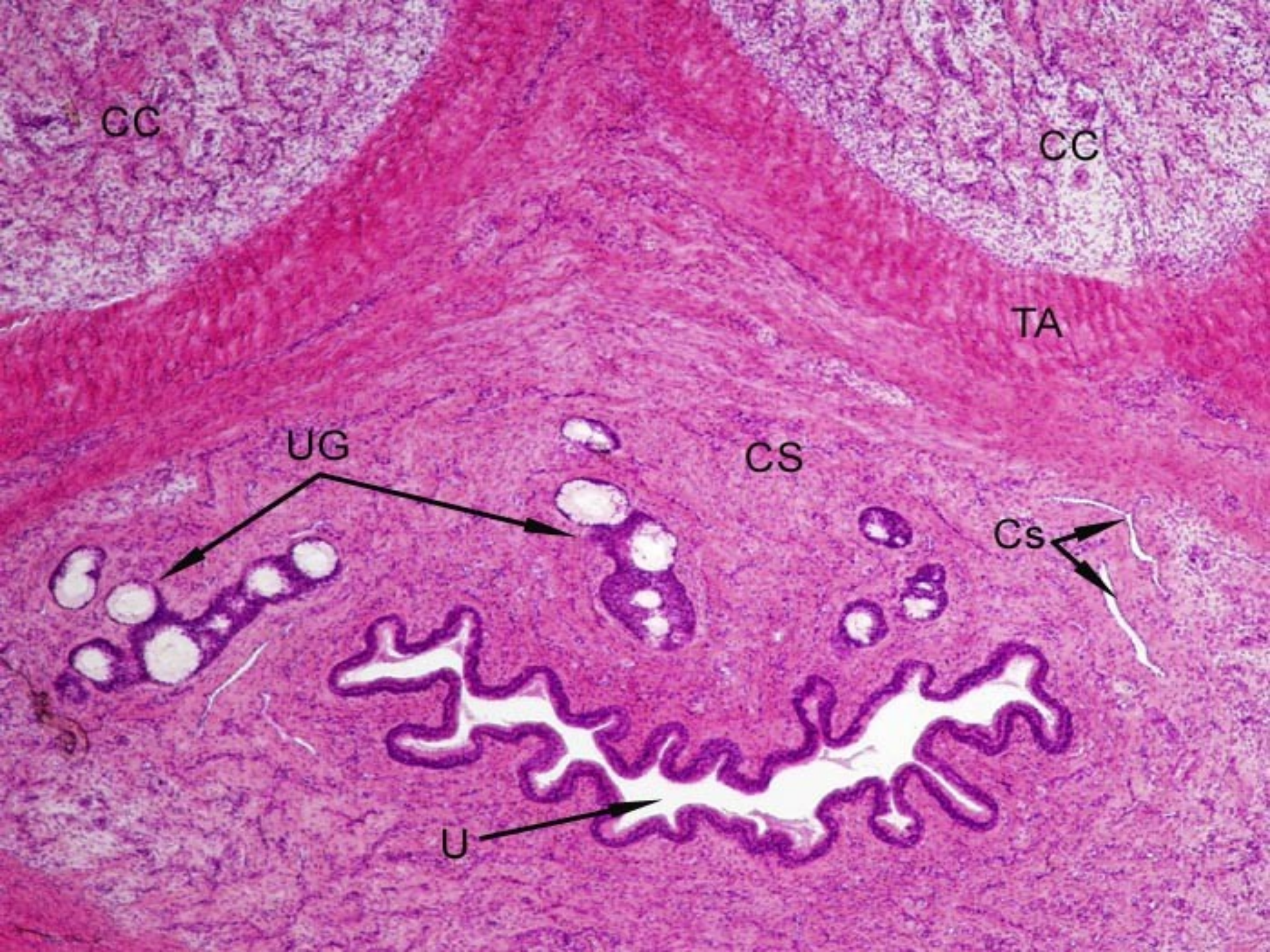


# Pyj – penis, phallos

- Kůže – její duplikatura - předkožka
- Tysonovy žlázy - smegma preputii
- Corpus spongiosum penis – corpora cavernosa
- Corpus spongiosum urethrae







CC

CC

TA

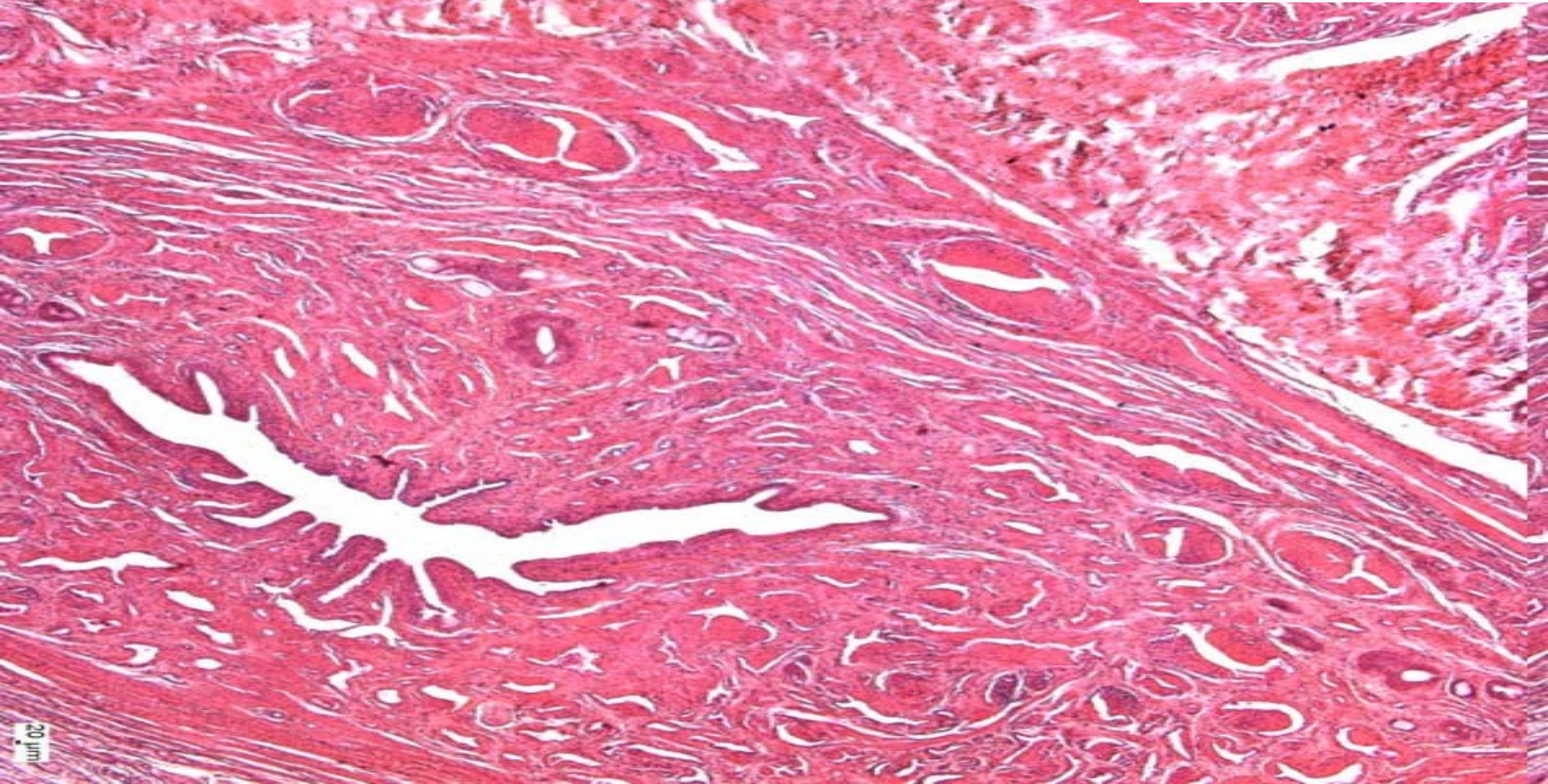
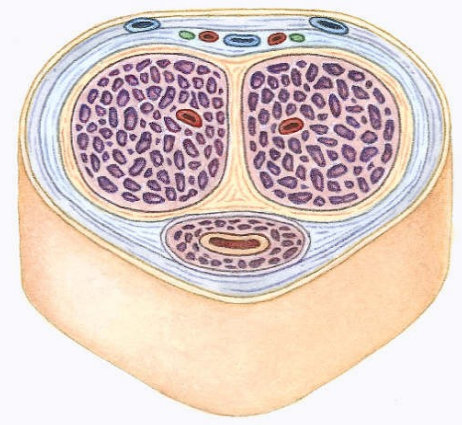
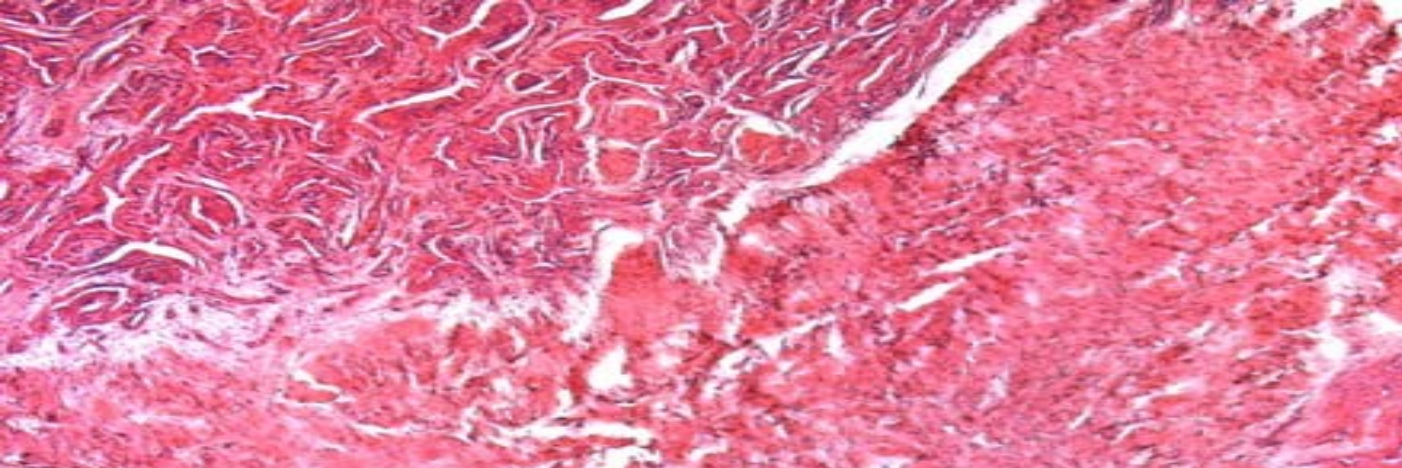
UG

CS

Cs

U

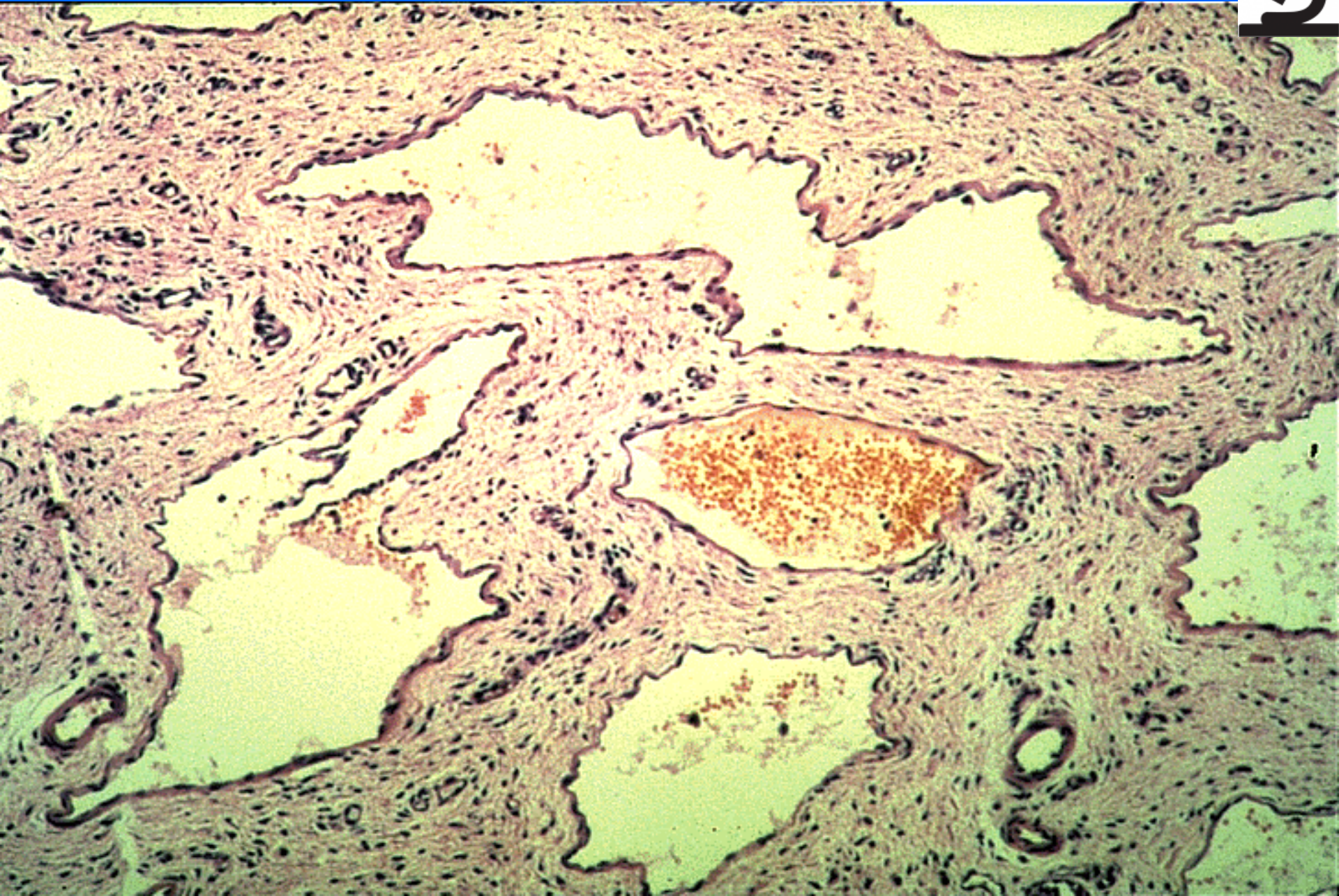




20 μm

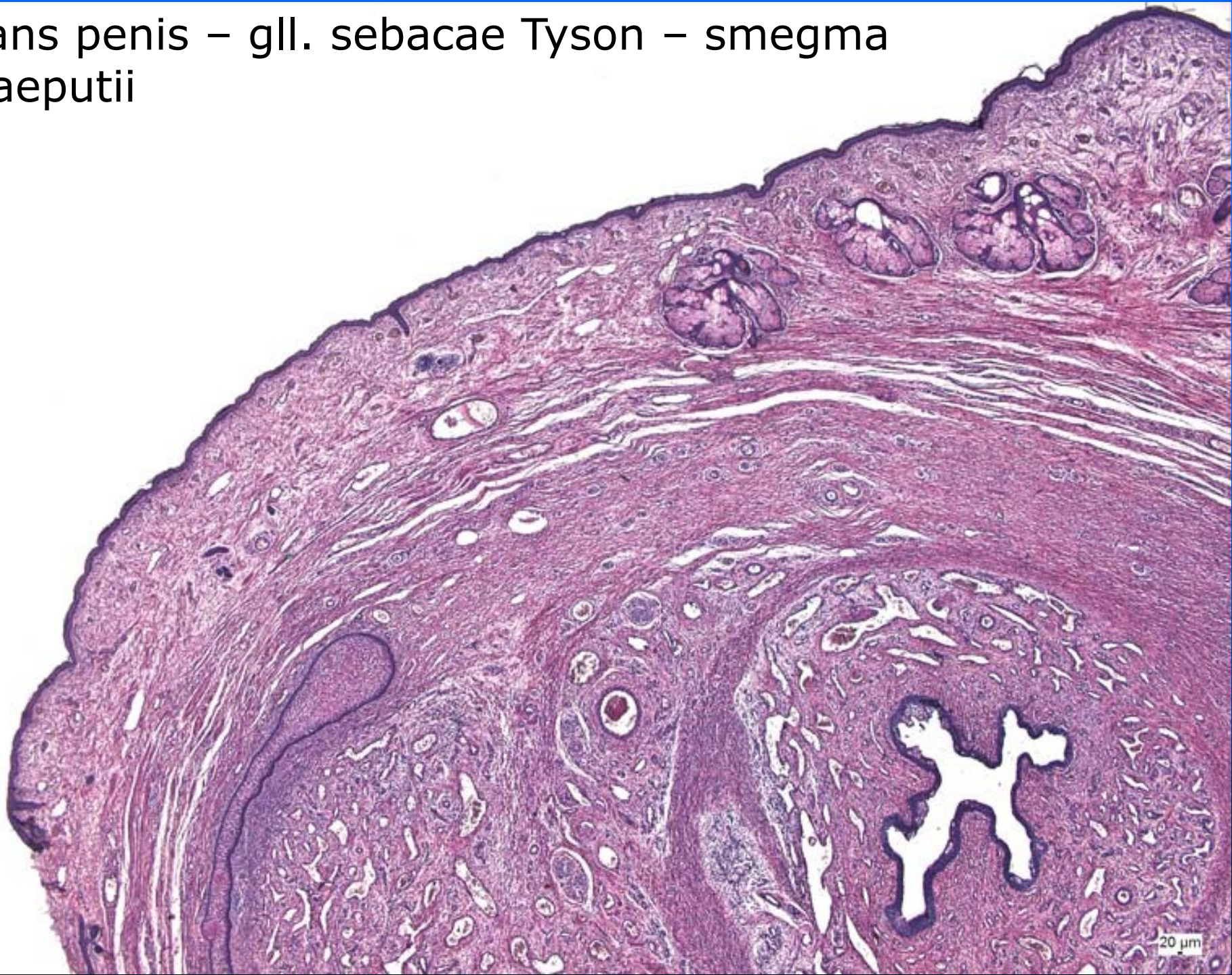


# Krevní lakuny





glans penis – gll. sebaciae Tyson – smegma  
praeputii





# Preparáty ke studiu

36. Testis (HE)

37. Epididymis (HE)

40. Prostata (HE)

41. Penis (HE)