

- Meiosis → spermatozoa : 48 jam
- Spermatogonia → spermatozoa : 64 jam
- Regulasi spermatogenesis:
 - Hormonal:
 - Folicle stimulating hormone (FSH): → sel Sertoli
 - Luteinizing hormone (LH): → sel Leydig
 - Suhu :
 - Scrotum
 - Plexus pampiniformis

■ Sel Sertoli

- Sangat sedikit, tdp diantara sel spermatogenik
- Bentuk : kolumnner ireguler
- Melekat pd membr. Basalis → permukaan lumen epitel seminiferous
- Prosesus sel Sertoli meluas diantara sel spermatogenik → batas sel tak terlihat
- Inti :
 - Oval/angular
 - Besar dan tercat terang
 - Nukleolus besar
 - Sumbu panjangnya tegak lurus dd tubulus

- Dinding lateralnya saling berhubungan mel tight junction membtk blood-testis barrier →
- Spermatogonia terletak di ruang basal (basal compartment)
- Yang lain : adluminal compartment
- Kadang tight junction membuka → sel spermatogenik dr ruang basal ke adluminal

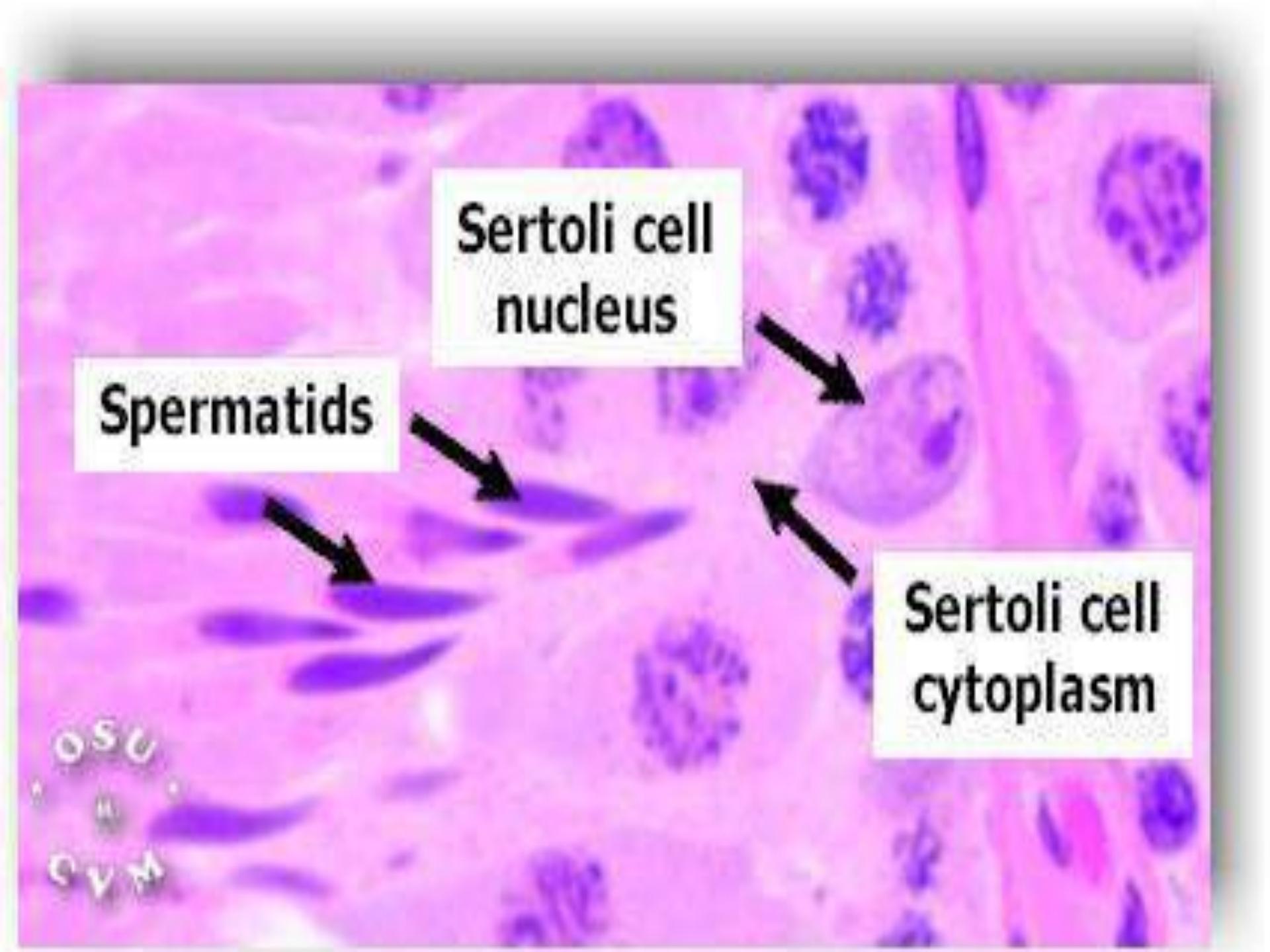


A histological section of testicular tissue stained with hematoxylin and eosin. The image shows several clusters of seminiferous tubules. The tubules contain germinal epithelium, including spermatogonia and spermatocytes, which appear as small, dark red dots. Sertoli cells, the supporting cells of the tubules, are larger, polygonal cells with pale, granular cytoplasm. A prominent cluster of Sertoli cells is visible in the lower right quadrant, with a white arrow pointing to one of them. The interstitium between the tubules contains stromal connective tissue and blood vessels, some of which are highlighted in blue.

Sel Sertoli

Sel myoid





A light micrograph showing a cluster of cells. Several large, pale-staining nuclei are visible. A prominent, elongated nucleus is labeled 'Sertoli cell nucleus'. To its left, a group of smaller, more uniform nuclei is labeled 'Spermatids'. Below the spermatids, the surrounding cytoplasm is labeled 'Sertoli cell cytoplasm'. Three black arrows point from the labels to their respective features in the image.

Sertoli cell
nucleus

Spermatids

Sertoli cell
cytoplasm

OSG

BL

CvA

- Sel Sertoli berfungsi :
 - Penunjang mekanis, proteksi
 - Regulasi nutrisi
 - Fagositosis
 - Sekresi : androgen binding protein
 - Blood testis barrier
 - Memproduksi inhibin dan activin yg mempengaruhi (+) dan (-) mekanisme feed back thd FSH dr hypothalamus

- Faktor-faktor yg mempengaruhi spermatogenesis :
 - Hormon:
 - LH : mempengaruhi sel Leydig
 - FSH: mempengaruhi sel Sertoli
 - Temperatur
 - Malnutrisi, alkoholisme, obat tertentu
 - Radiasi sinar X dan garam cadmium dll

■ Jaringan interstitial

Pada jaringan ini terdapat :

- Sel Leydig : komponen endokrin dr testis
 - Mensintesis & mensekresi testosteron
 - Bergerombol
 - Sitoplasma asidofil dan bergranula halus
 - Inti besar, bulat biasanya eksentris



Sel Leydig

- Ductus dari testis
 - Ductus intra testicularis:
 - Tubuli recti
 - Rete testis
 - Ductuli efferentes
 - Ductus excretorius genitalis:
 - Epididymis
 - Ductus deferens
 - Urethra

- Tubuli recti

- Ep kolumner rendah

- Rete testis

- Ep. Kubis atau squamous

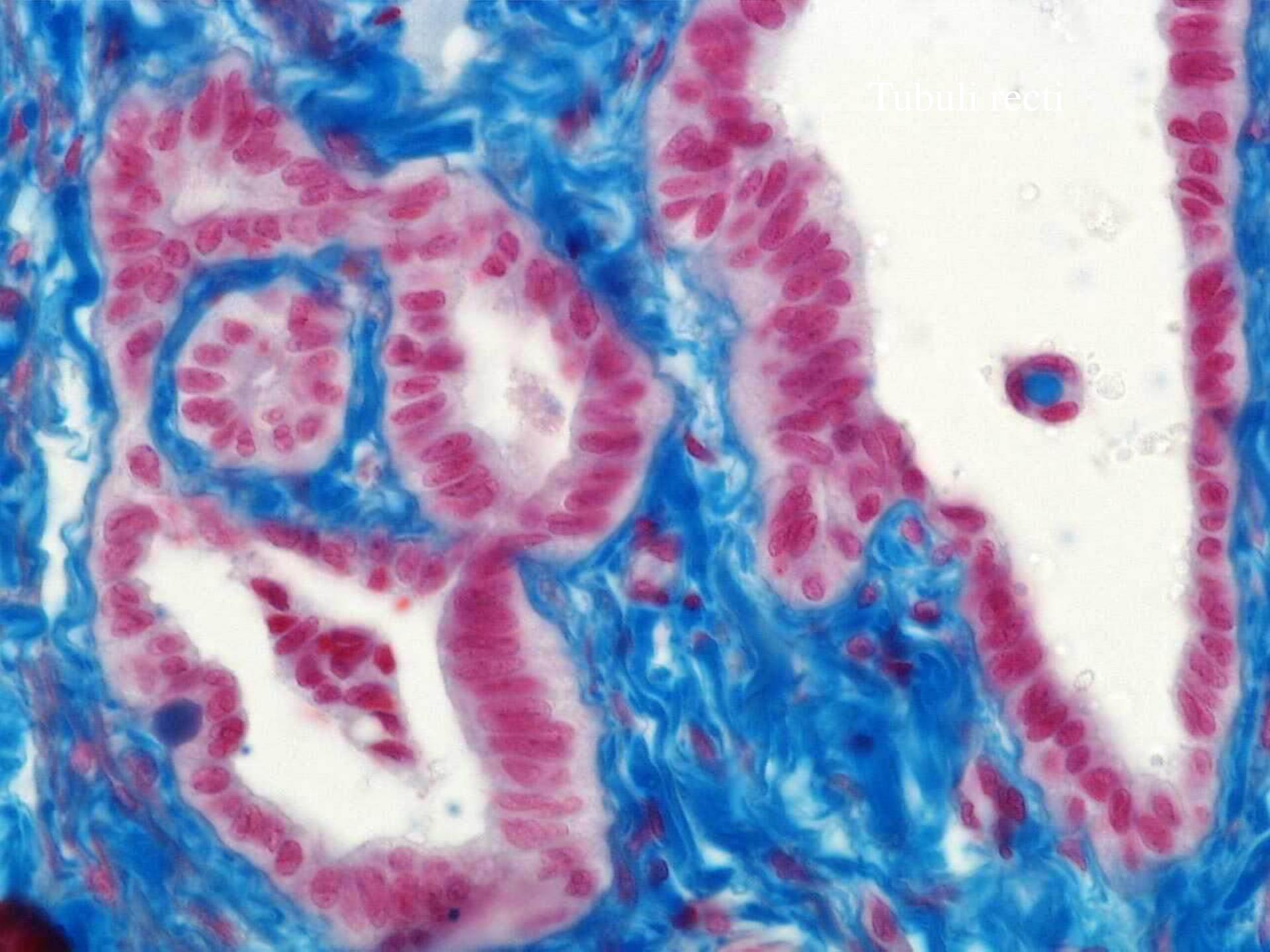
- Ductuli efferentes

- Ep absorpsi
 - Ep bersilia

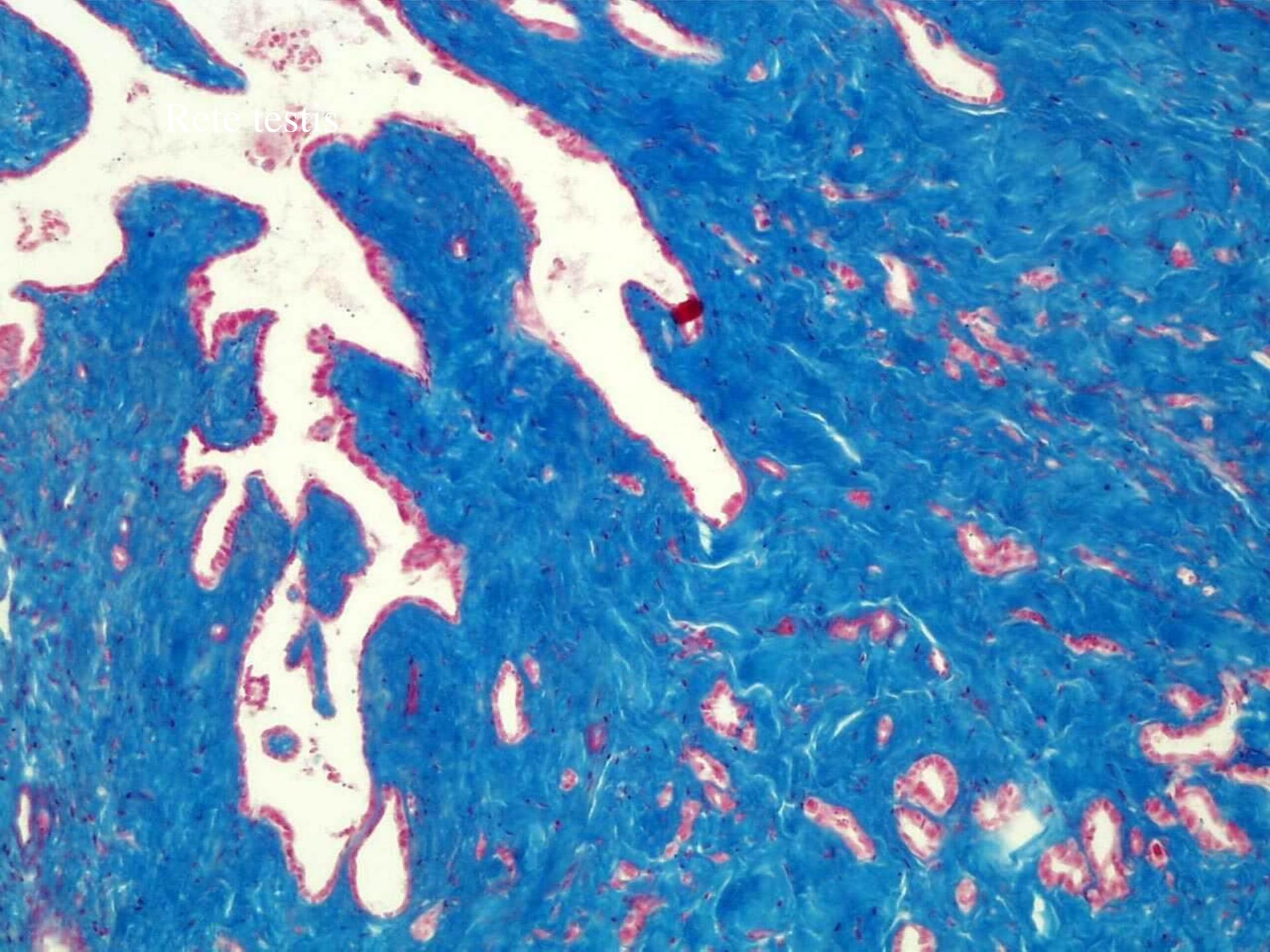
Perbedaan tinggi kedua mcm ep tsb
yang menyebabkan lumen ductuli eff.
Tampak bergelombang

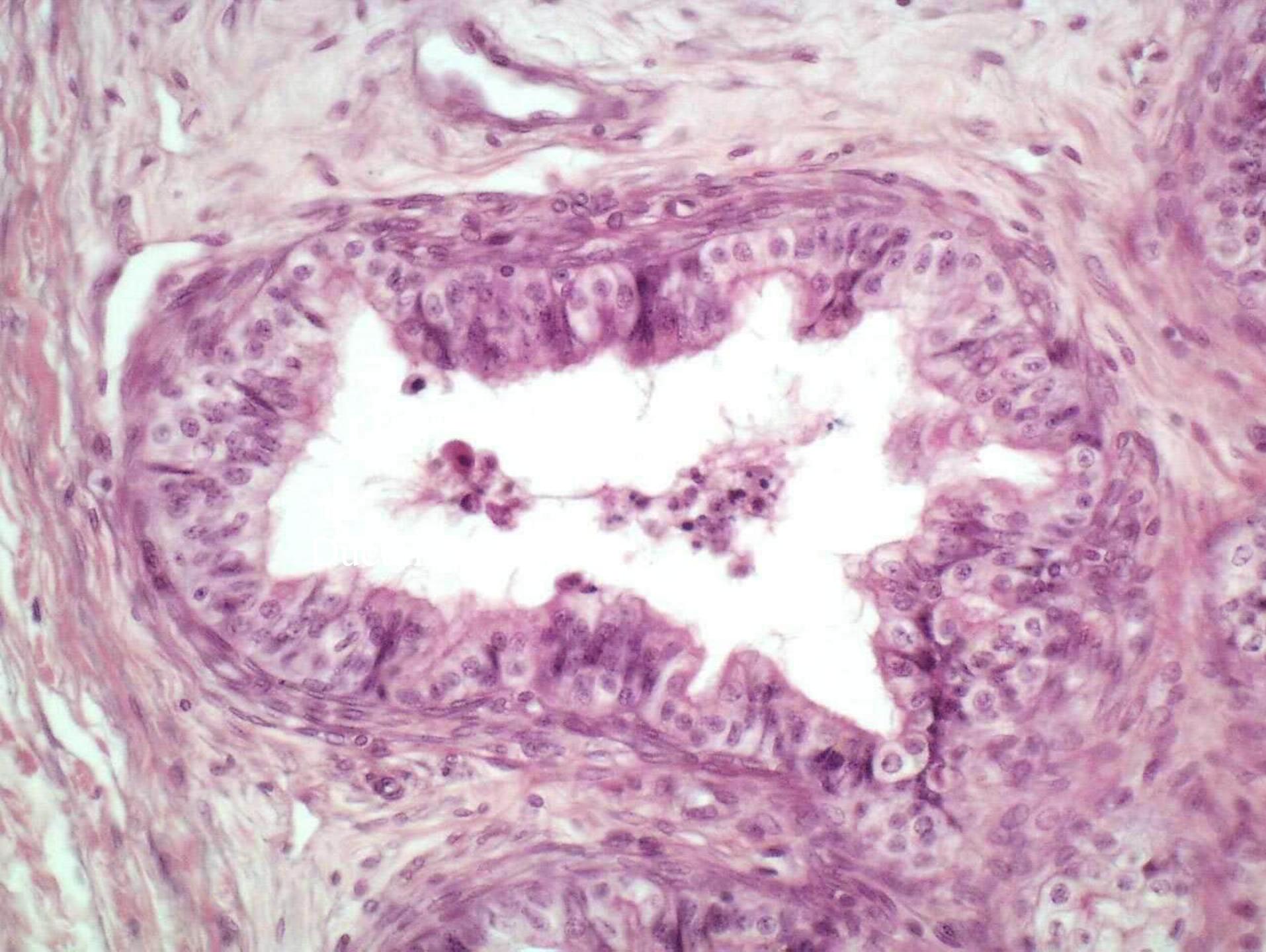
Ductuli eff. Bermuara di epididymis

Tubuli recti



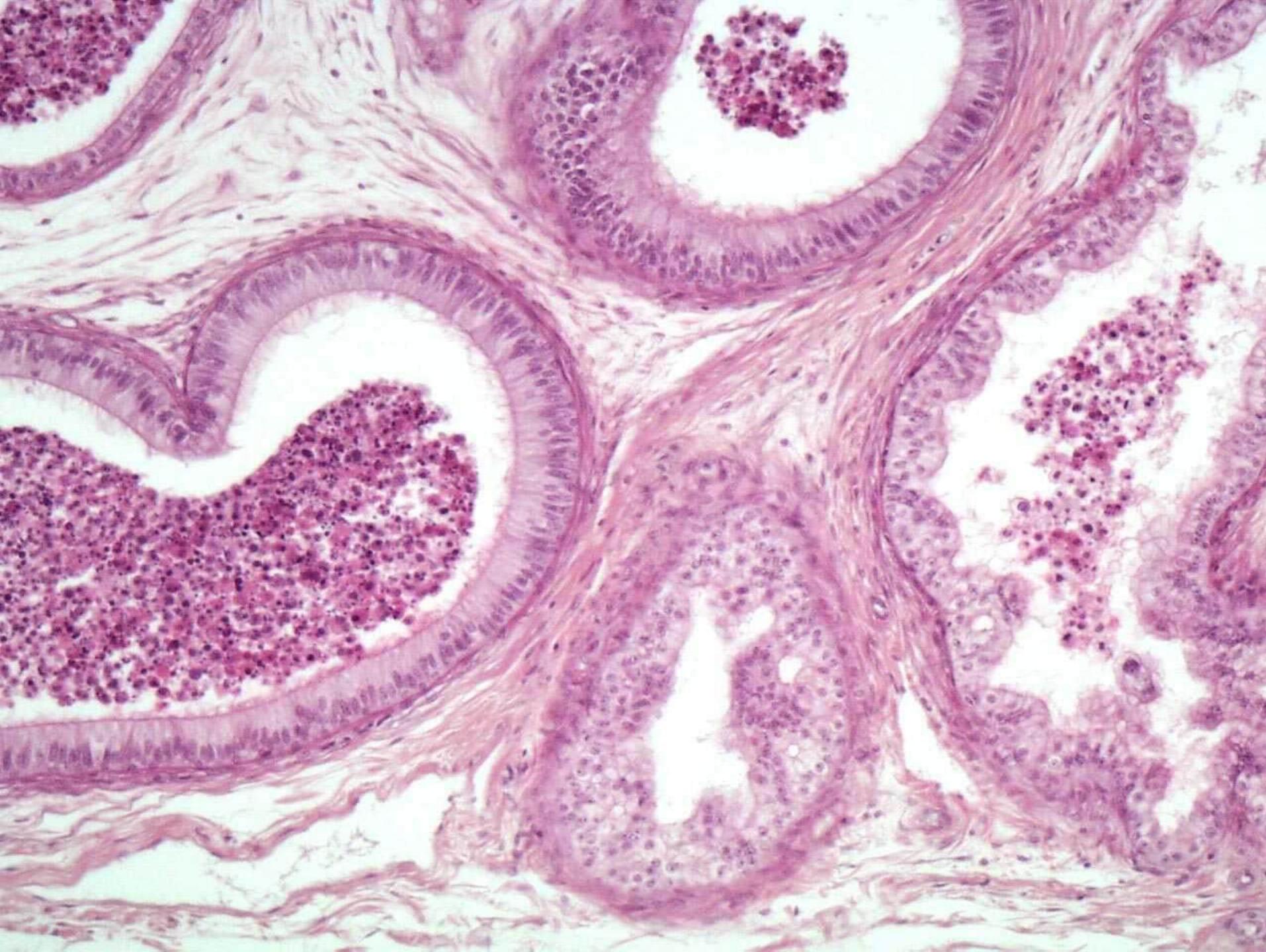
Rete testis





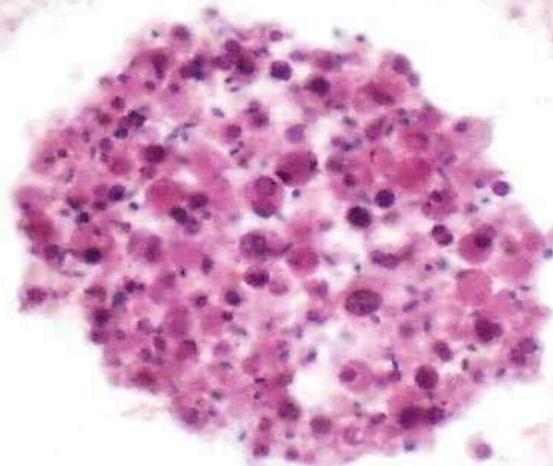
■ Epididymis

- Ep pseudostratified columnar
- Sel yg memp stereocilia panjang : principle cells
- Di bag basal : tdp sel basal → utk regenerasi epitel
- Dinding mengandung otot polos





Sel basal



- Ductus/vas deferens
 - Mukosa memp lipatan longitudinal dangkal
 - Dilapisi ep ps stratified
 - Memp stereocilia panjang
 - Muscularis : tebal t.d long-cir-long;
lap sirkuler paling tebal
 - Dilapisi adventitia