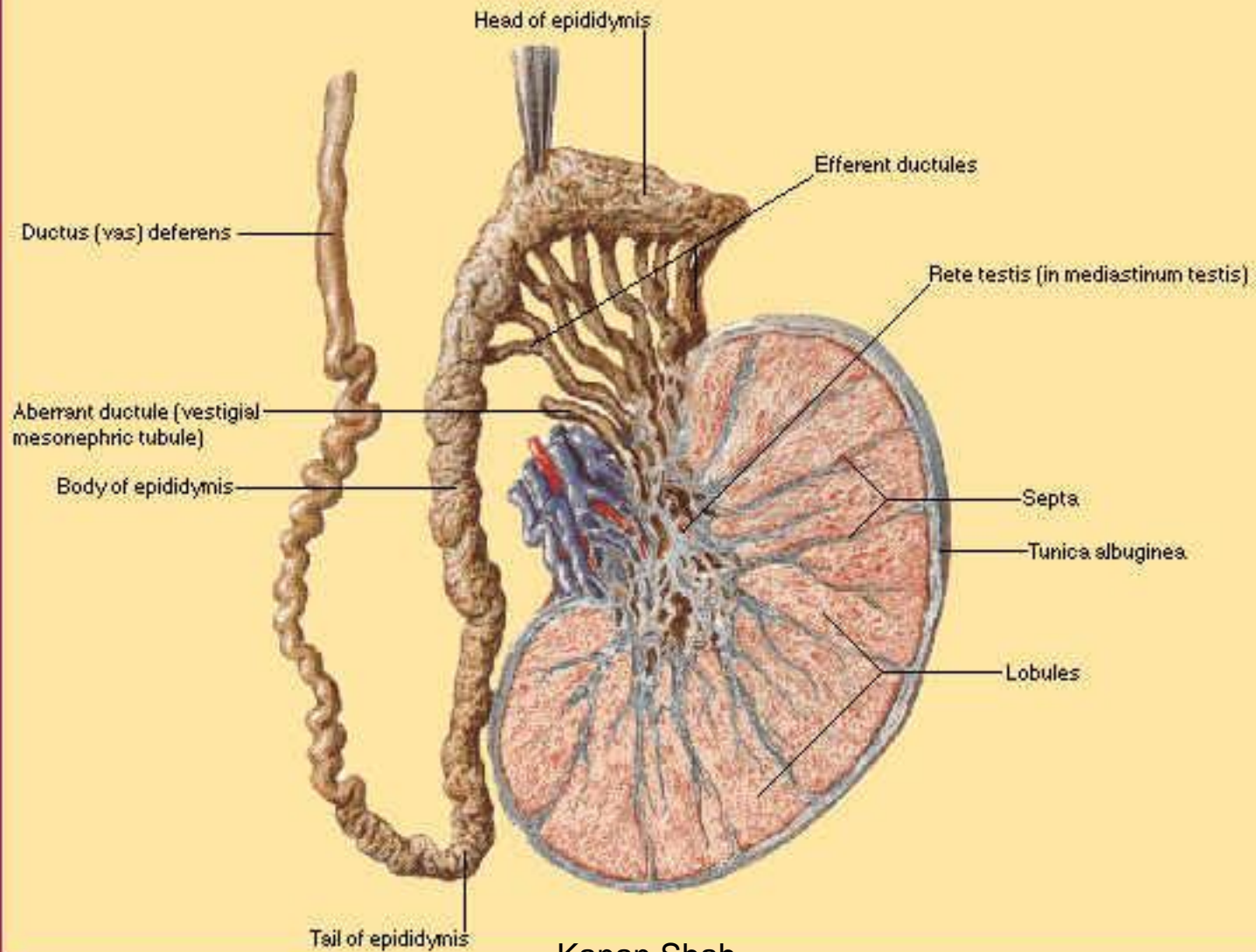


MALE REPRODUCTIVE SYSTEM

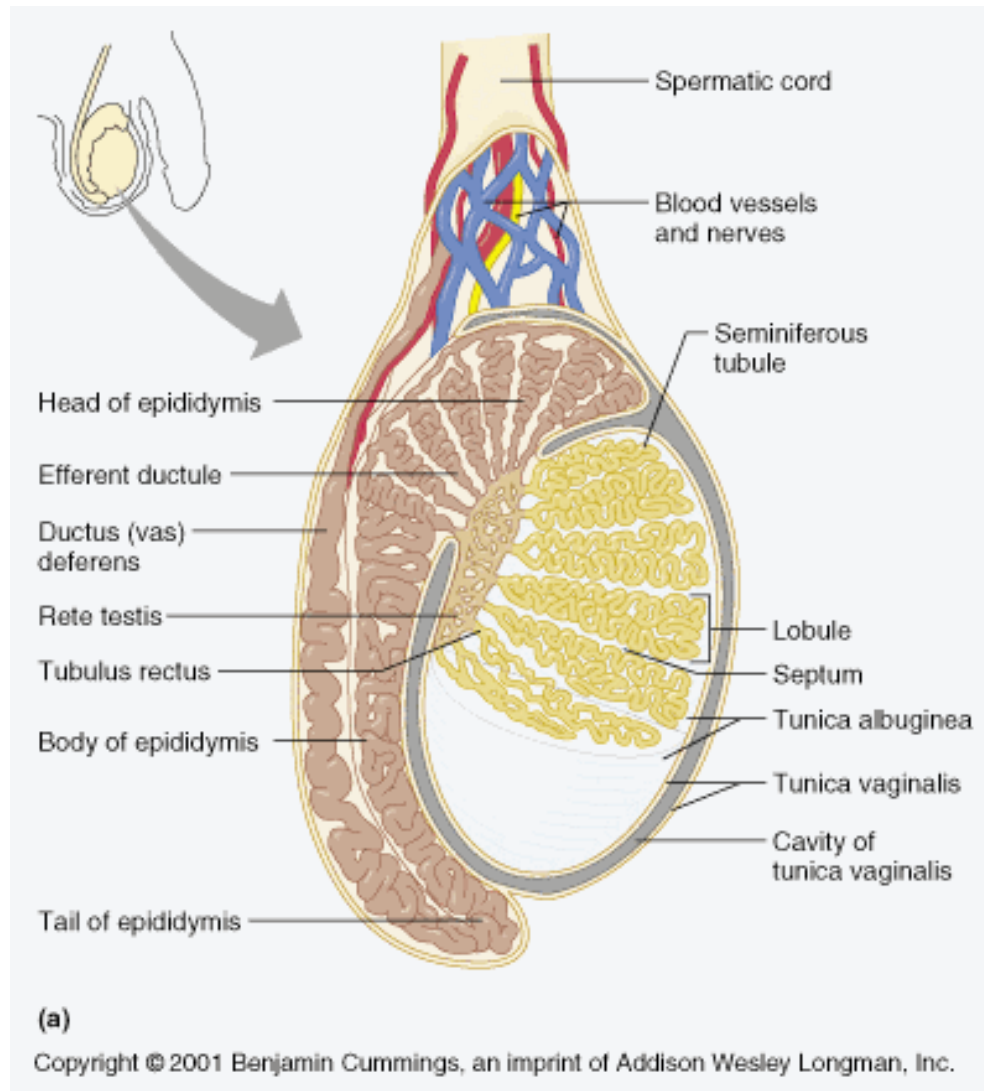
TESTIS , EPIDIDYMIS , VAS DEFERENCE ,
PROSTATE , SEMINAL VESICLE , PENIS.

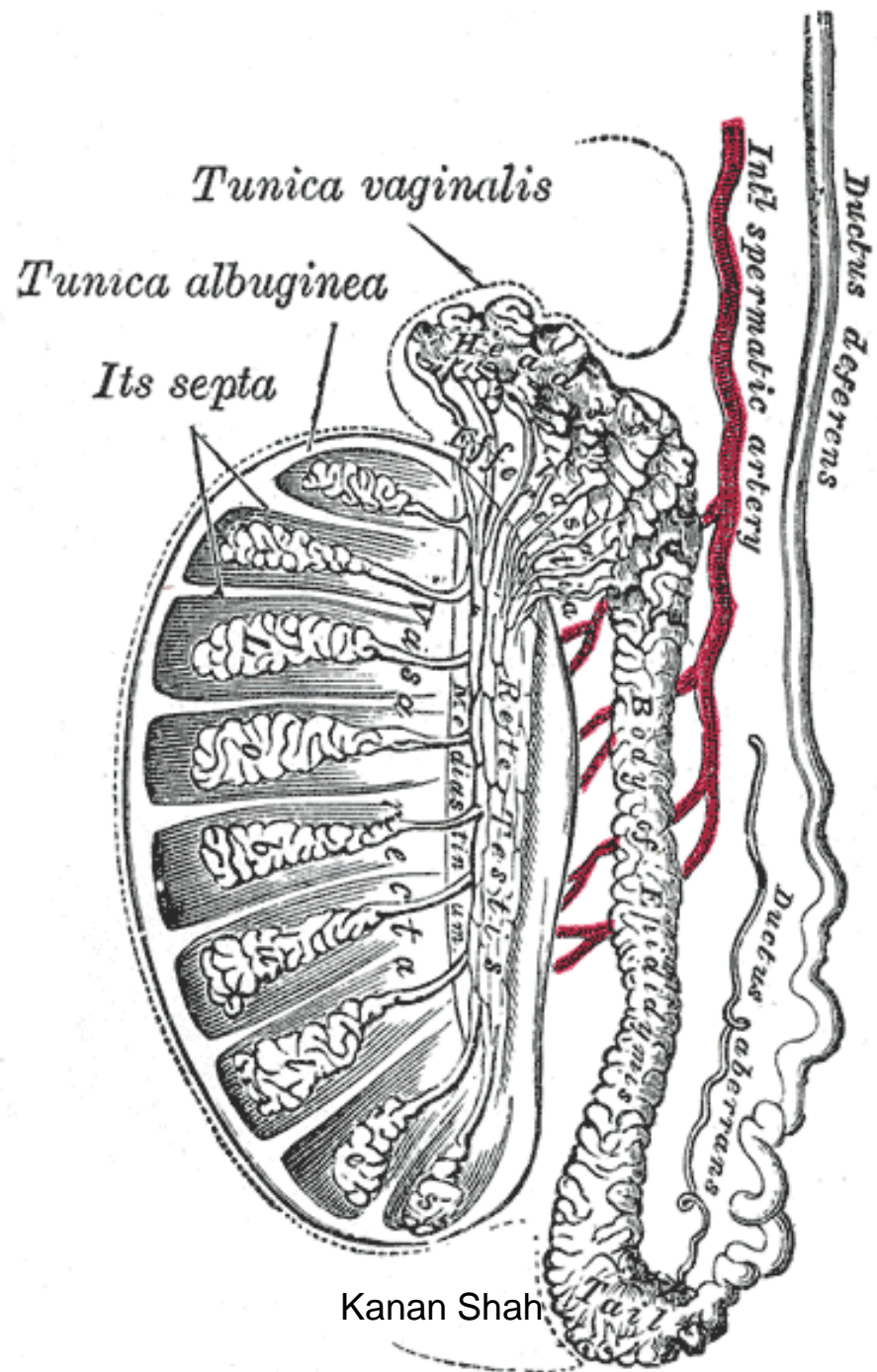
Testis, Epididymis & Ductus Deferens



TESTIS

- LOBULE OF TESTIS : SEMINIFEROUS TUBULES and INTERSTITIAL CELLS.
- SEMINIFEROUS TUBULES:
 - BASEMENT MEMBRANE
 - SPERMATOGENIC CELLS
 - SUPPORTING CELLS OF SERTOLI





- **CELLS OF SERTOLI:** ELONGATED POLYHEDRAL CELLS, EXTENDS FROM BASEMENT MEMBRANE TO LUMEN OF SEMINIFEROUS TUBULES.
- Does not divide during the reproductive life.
- Their lateral walls are united by tight junctions forming a continuous barrier that prevents the passage of macromolecules from the interstitial space to the interior of the tubule.

FUNCTIONS :

- Provide nutrition to immature spermatozoa
- Maintain cohesion between generations of spermatogenic cells
- Phagocytose the residual bodies
- Secrete oestrogenic hormone.

- **INTERSTITIAL CELLS OF LEYDIG :**

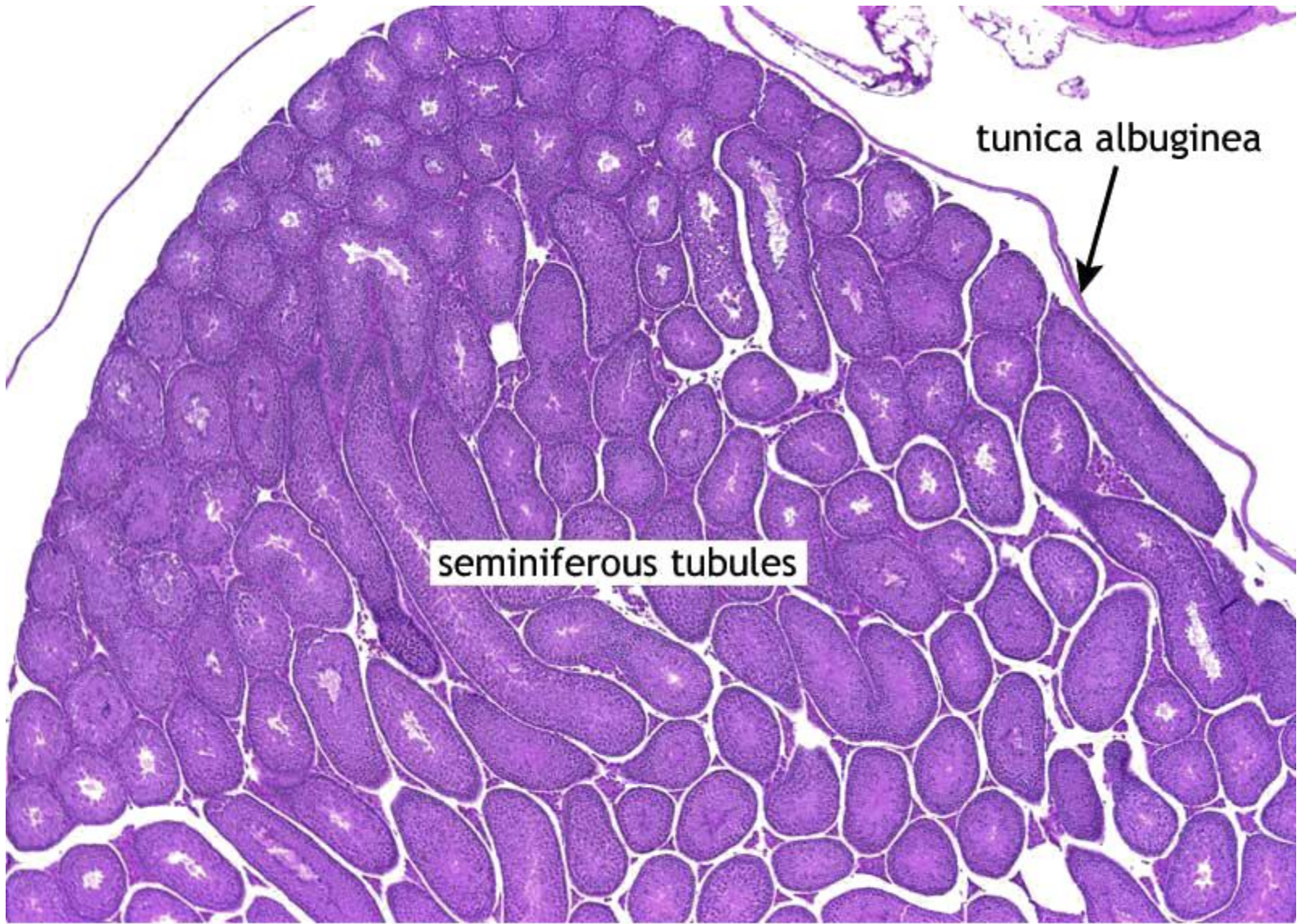
polyhedral cells within lobules of testis and external to seminiferous tubules. Yellowish pigments in the cytoplasm.

Abundant in fetal testis, disappear after birth , reappearance at puberty and persist throughout the reproductive life.

secrete testosterone and probably oestrogen.

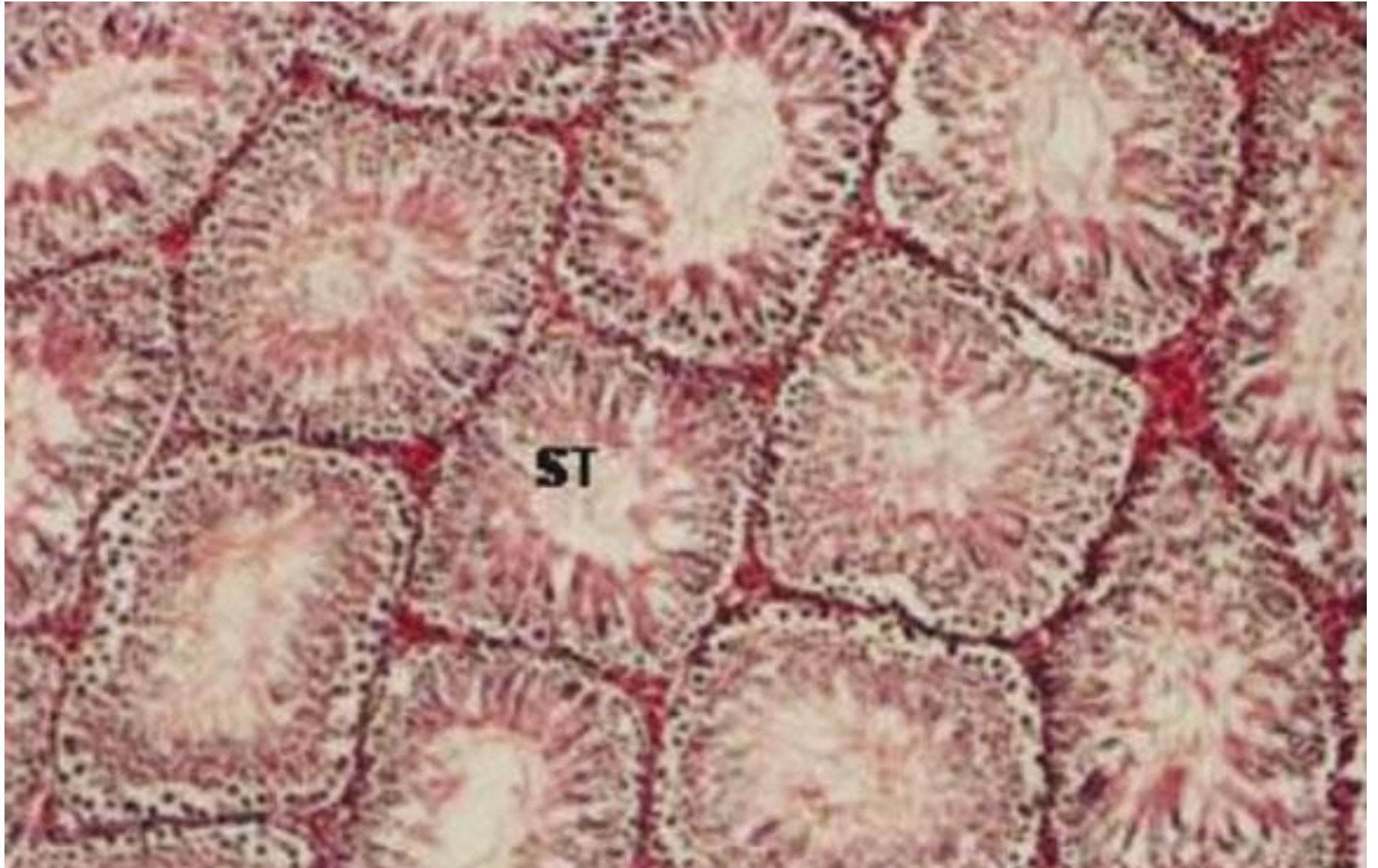
FUNCTIONS :

- Provide machineries for the descent of testis.
- After puberty they stimulate the growth of secondary sex characters.
- Initiate heterosexual drive.
- Increase height of epithelial cells of prostate and seminal vesicle.

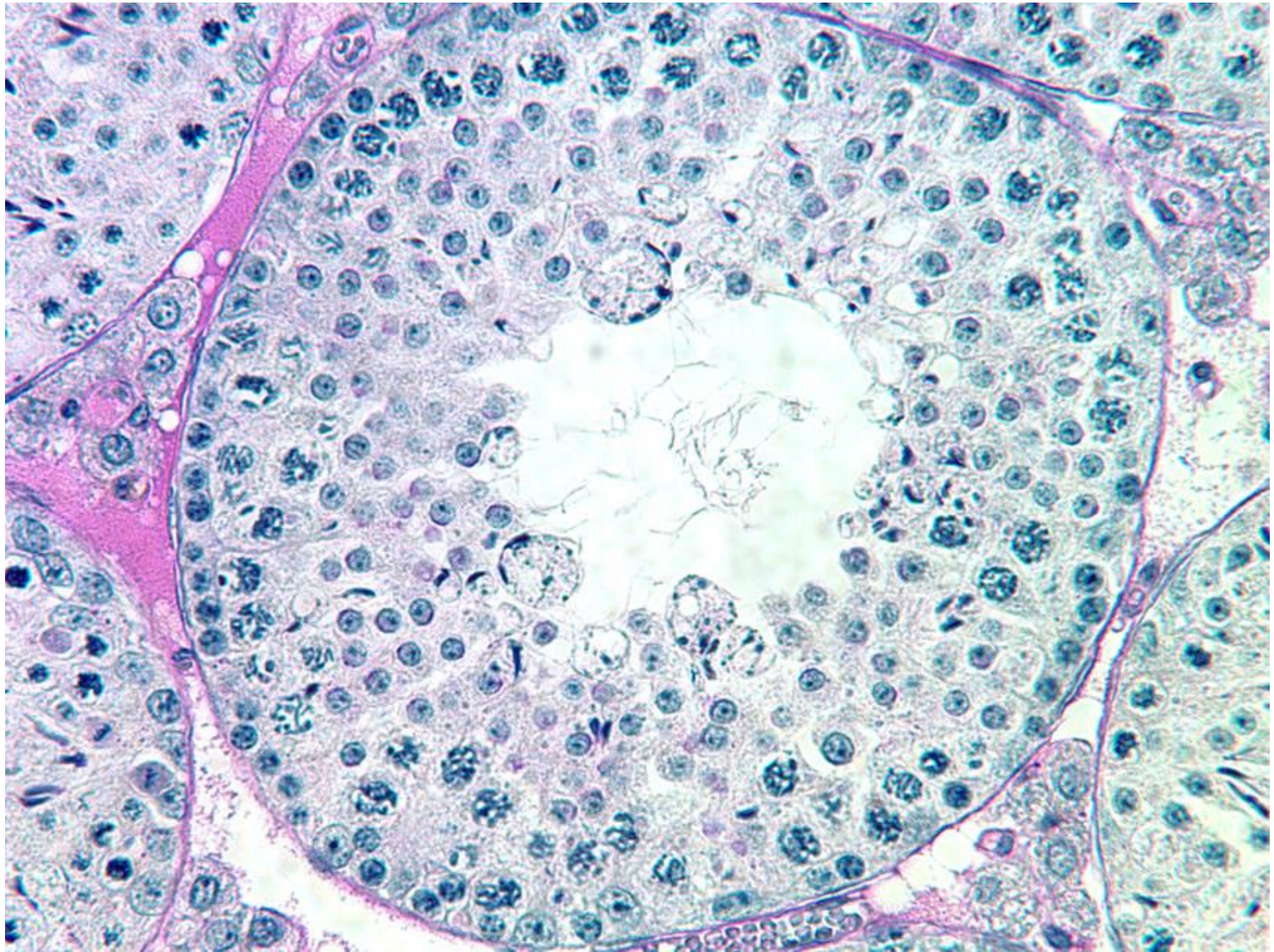


tunica albuginea

seminiferous tubules

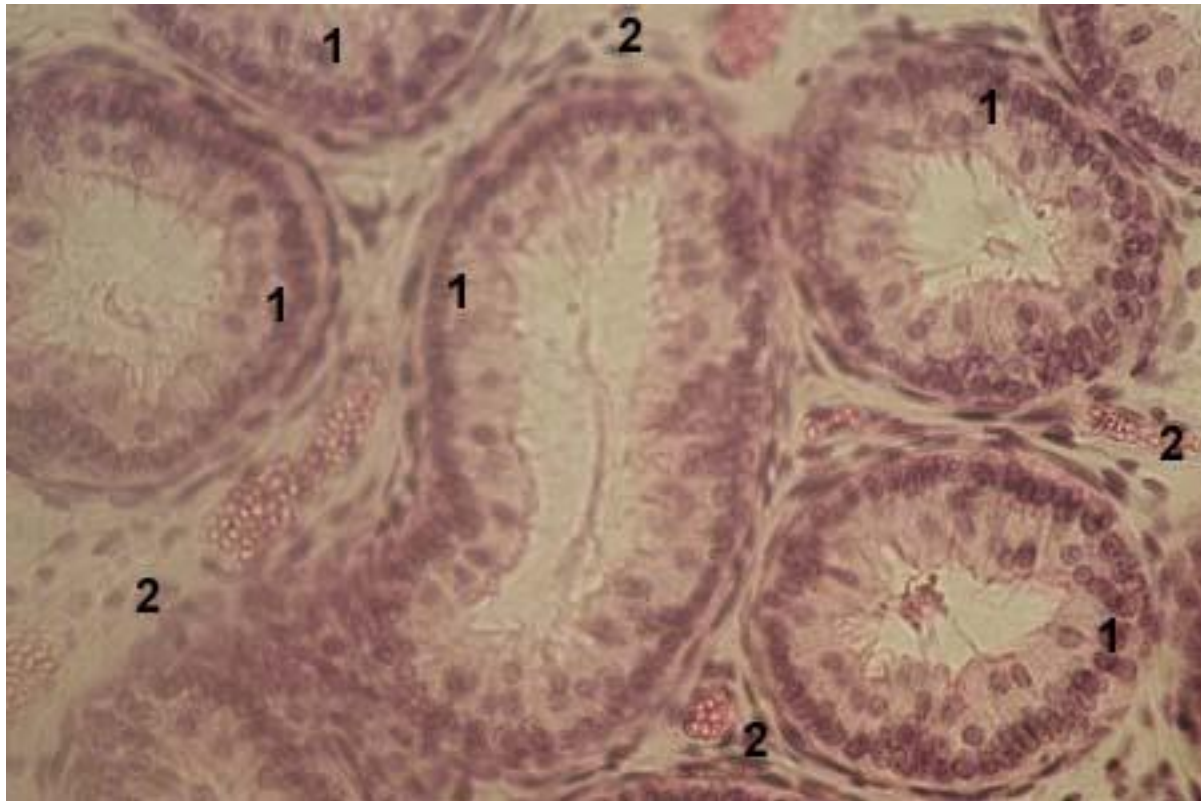


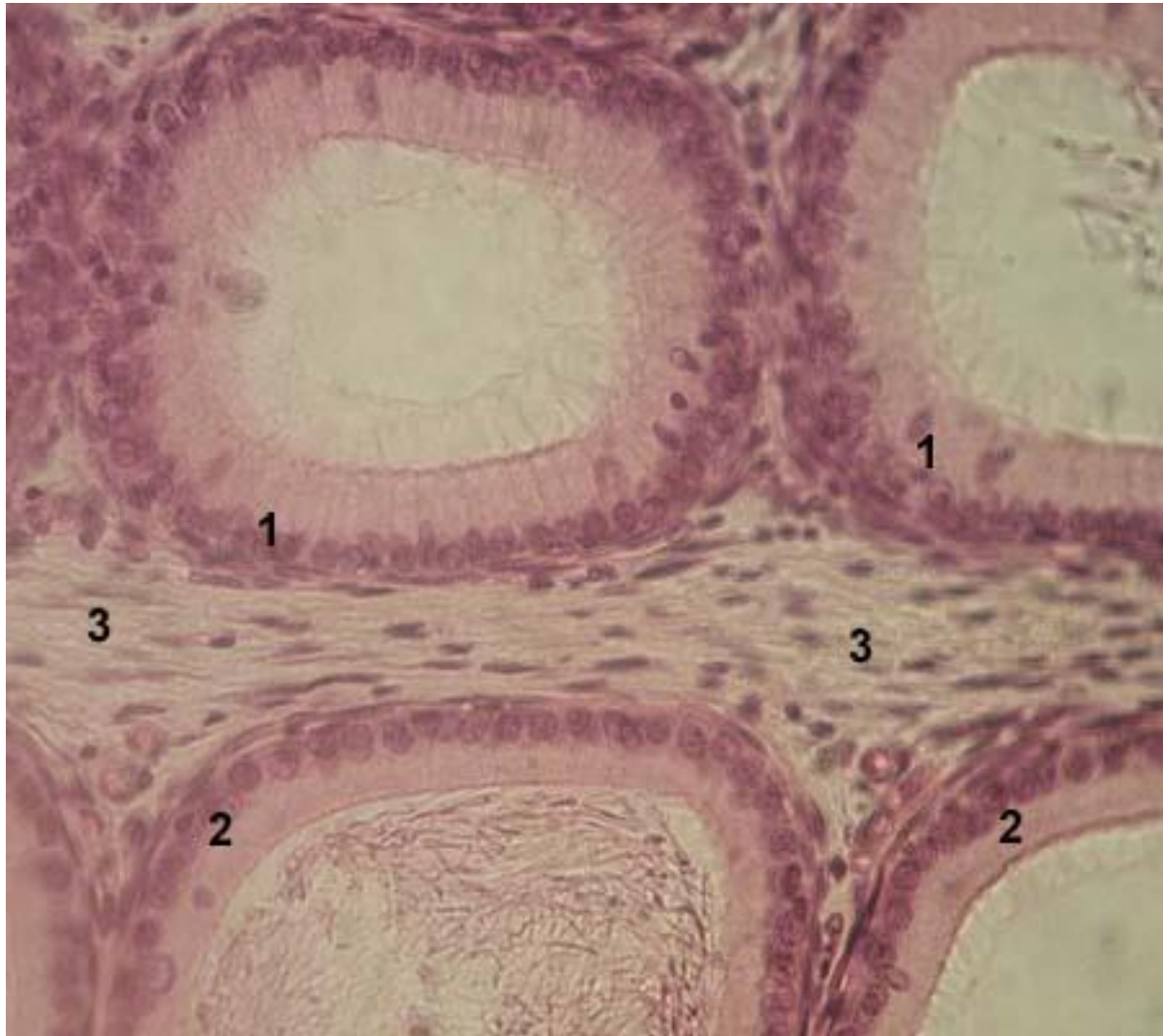




EPIDIDYMIS

- EFFERENT DUCTULE IS LINED BY CILLIATED COLUMNAR EPITHELIUM REST ON BASEMENT MEMBRANE AND IS SURROUNDED BY A THIN LAYER OF MUSCLE FIBERS CIRCULARLY ARRANGED.
- IN DUCT MUSCLE COAT IS THICK AND EPITHELIUM IS COLUMNAR AND PSEUDOSTRATIFIED WITH LONG STEREOCILIA.





VAS DEFERENCE

- THREE COATS : OUTER AREOLAR
MIDDLE MUSCULAR
INNER MUCOUS

MIDDLE MUSCLE COAT IS THICK, OUTER LONGITUDINAL
INNER CIRCULAR LAYERS OF MUSCLES.

LINNING EPITHELIUM IS SIMPLE COLUMNAR , BUT
PSEUDOSTRATIFIED COLUMNAR IN DISTAL PART. CELLS ARE
CILLIATED IN EXTRAABDOMINAL PART OF DUCT.

Slide 31 Vas deferens

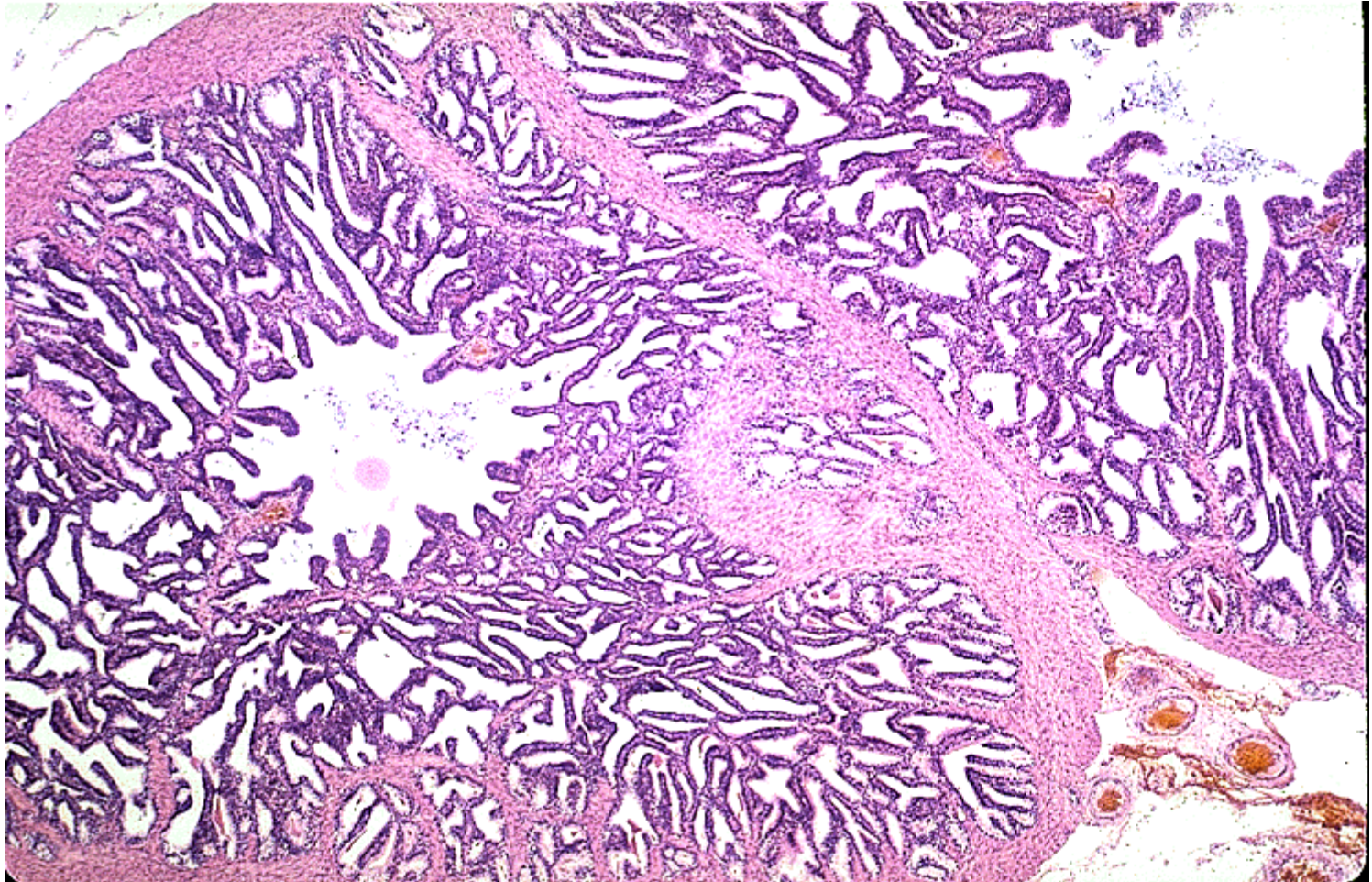


THE SEMINAL VESICLES

- THREE COATS : AREOLAR , MUSCULAR , MUCOUS.

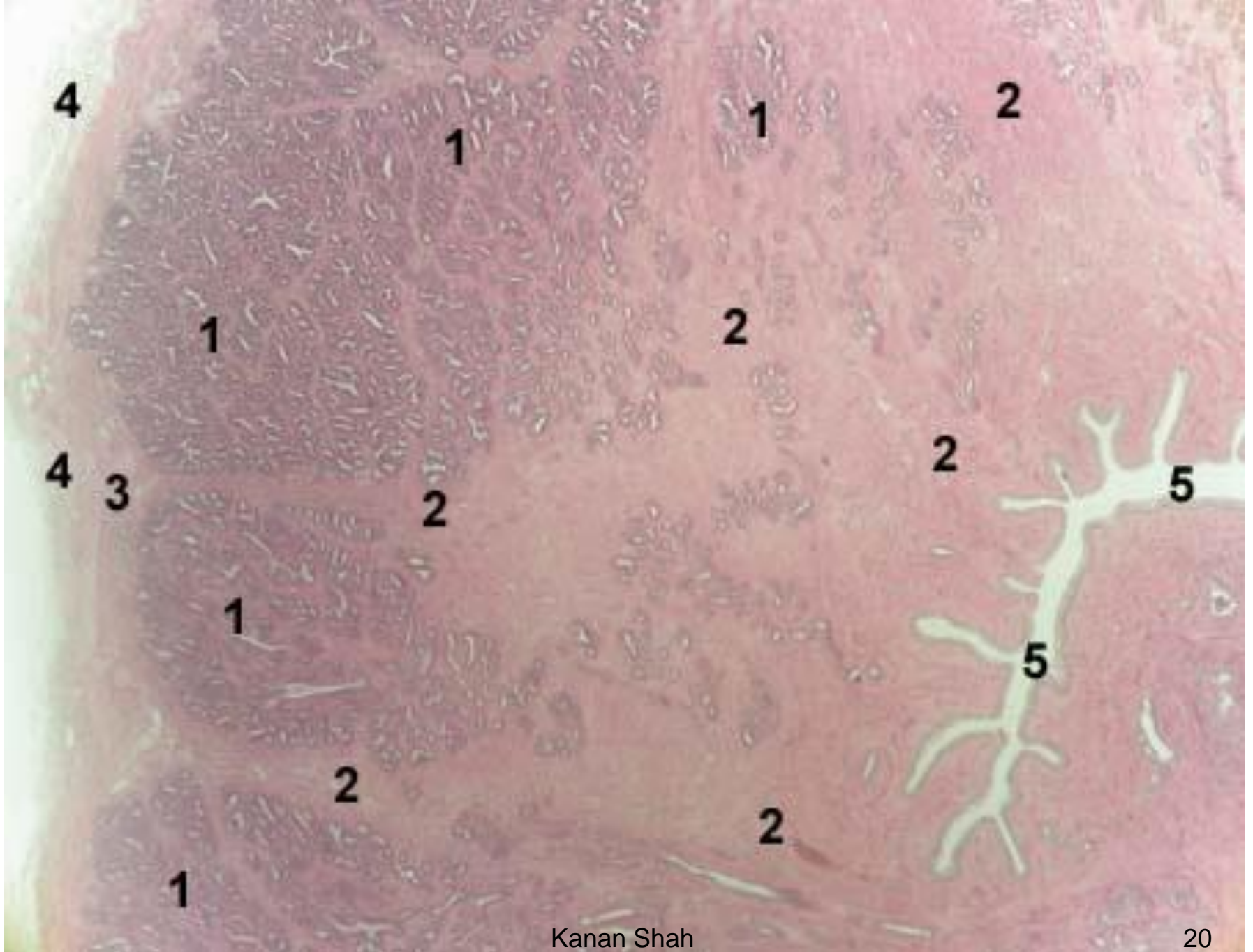
MUCOUS MEMBRANE THROWN IN TO NUMEROUS FOLDS AND IS LINE BY SIMPLE COLUMNAR EPITHELIUM , OCCATIONAL GOBLET CELLS IN DIVERTICULA.

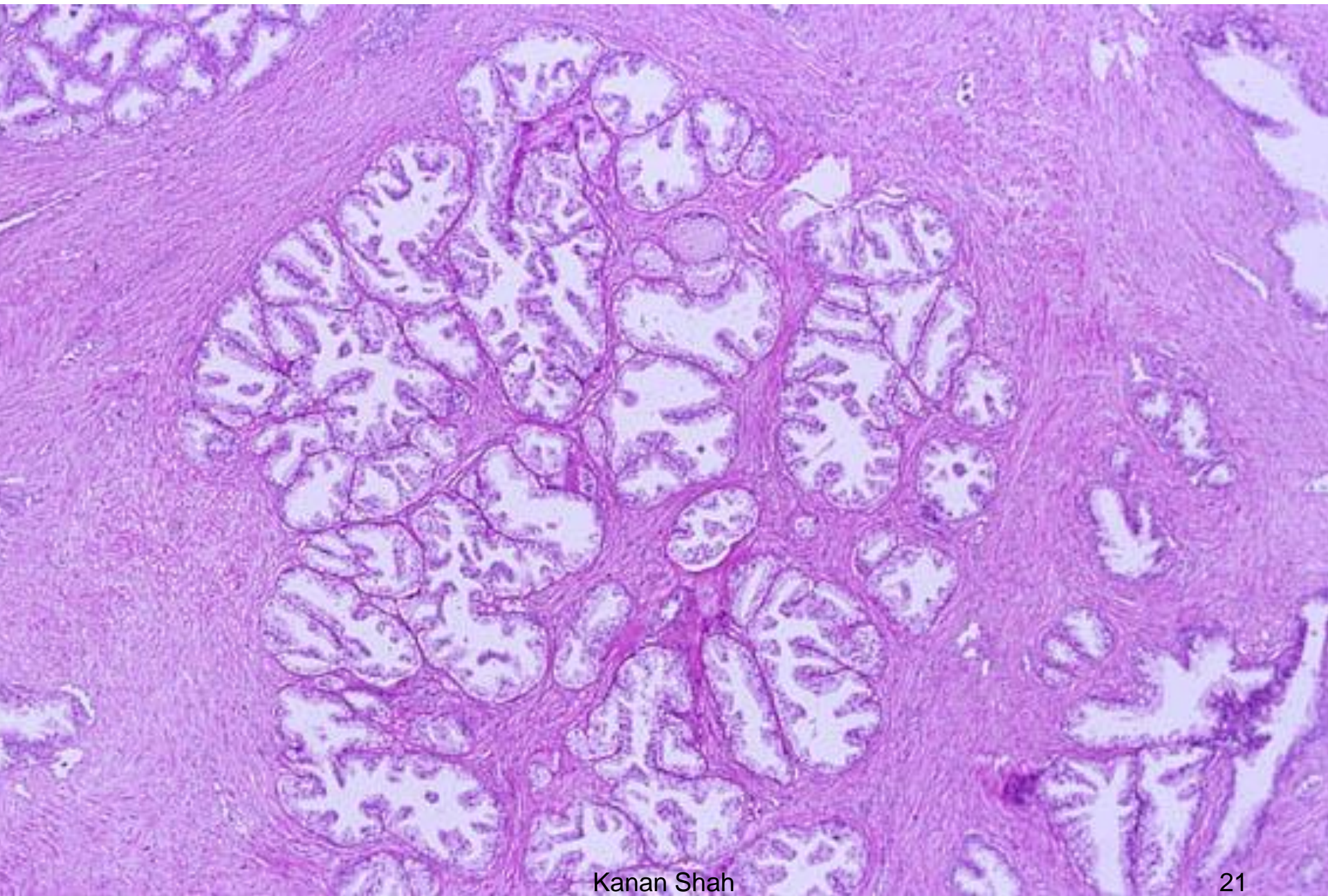
Seminal vesicle



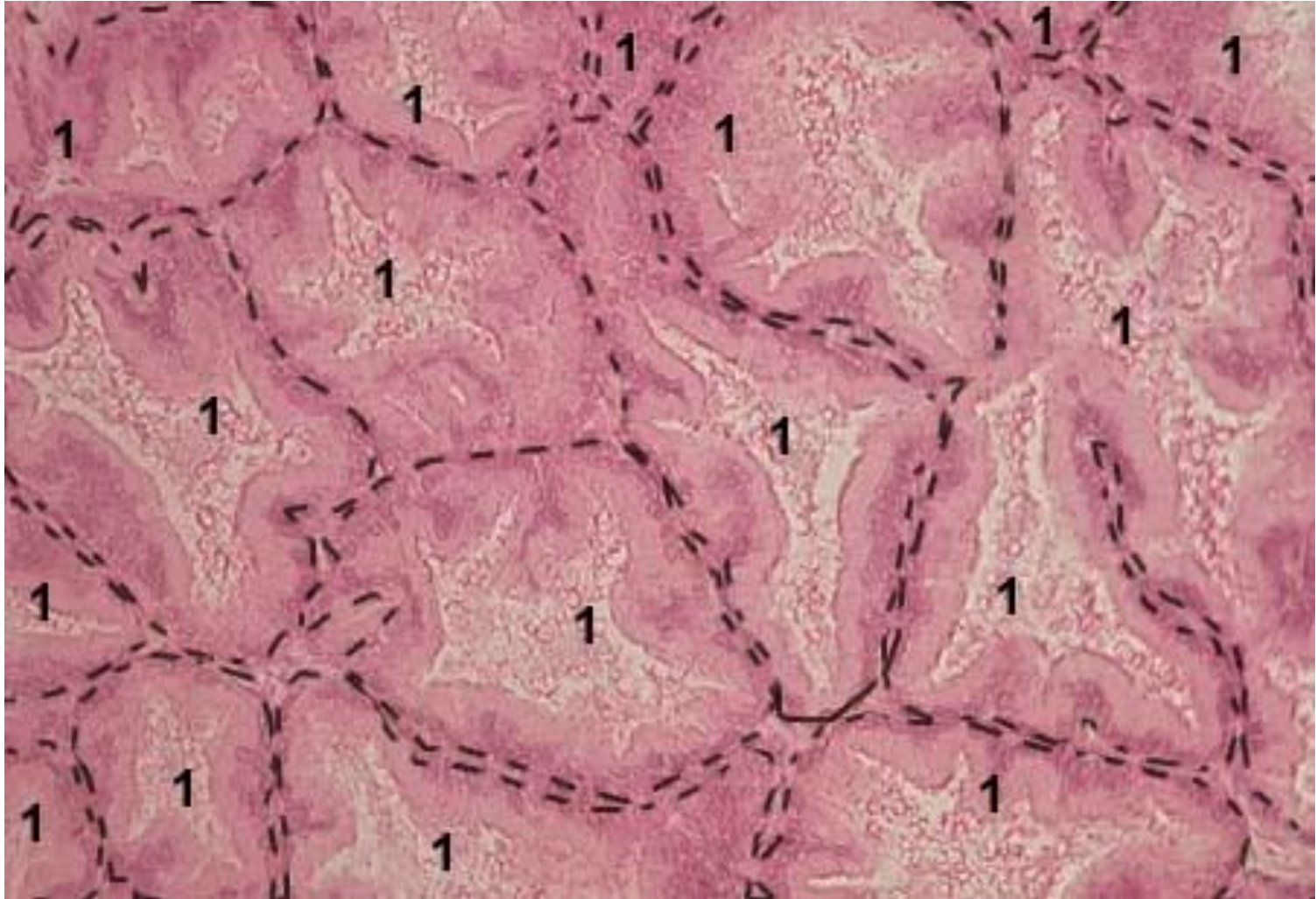
PROSTATE

- FIBROMUSCULAR GLAND
 - COMPOUND TUBULOALVEOLAR GLAND EMBEDDED IN FRAMEWORK OF FIBROMUSCULAR TISSUE.
 - FIBROUS TISSUE - CAPSULE , POSTROMEDIAN SEPTUM
 - MUSCLE - SMOOTH MUSCLE CONTINUOUS WITH DETRUSOR MUSCLE OF THE BLADDER. ARRANGED IN OUTER SHEET AND INNER SHEET CONNECTED BY RADIATING MUSCLE FIBERS.
 - GLANDS - THREE CONCENTRIC LAYERS
 - INNER MUCOUS
 - INTERMEDIATE SUBMUCOUS
 - OUTER MAIN GLANDS
- INNER CAPSULE INTERVENES BETWEEN MAIN GLANDS AND SUBMUCOUS GLANDS.



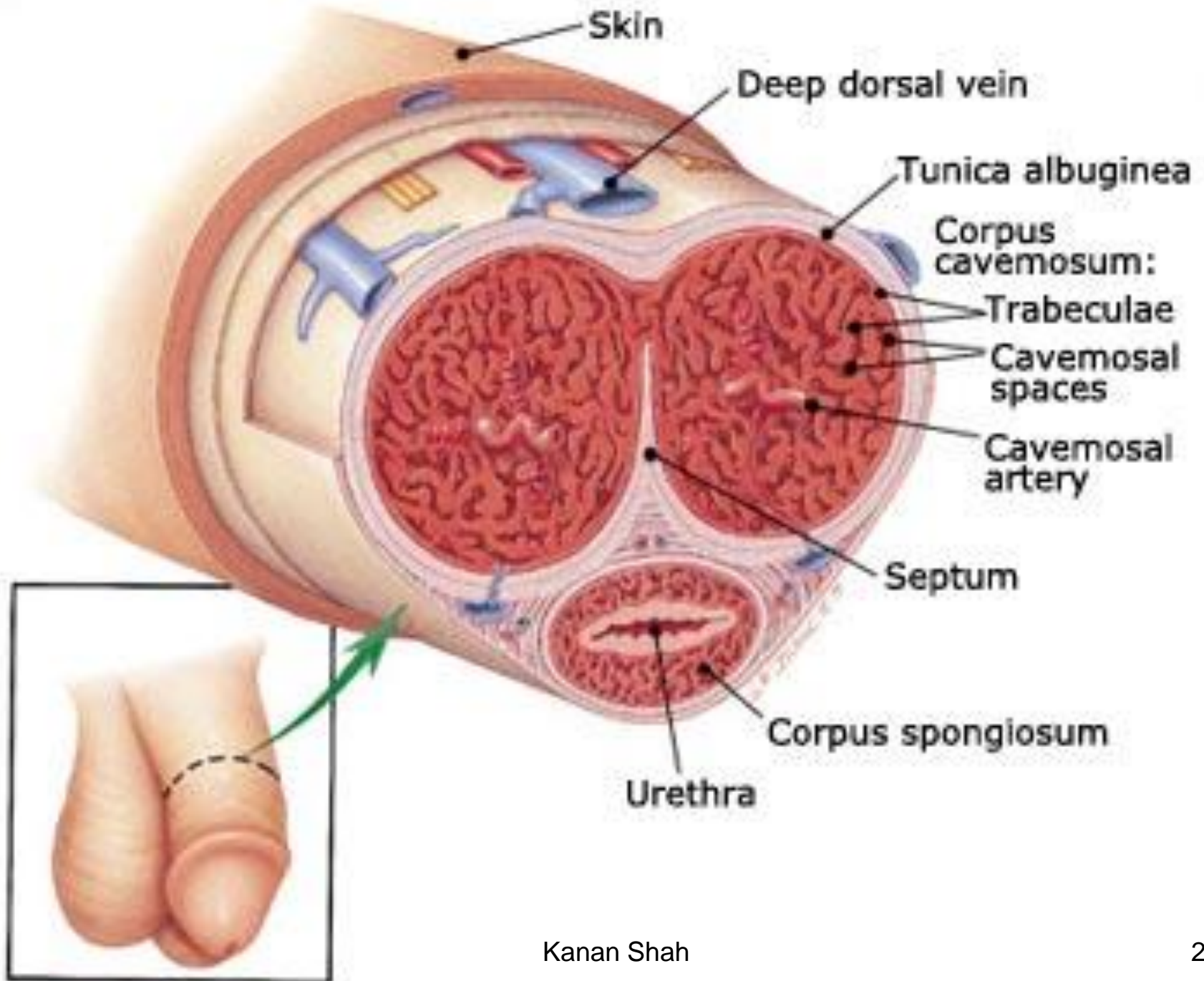


Prostate



PENIS

- THREE ERECTILE TISSUE
- TWO CORPORA CAVERNOSA SEPARATED BY MEDIAN FIBROUS SEPTUM. CORPUS SPONGIOSUM TRVERSED BY THE PENILE URETHRA.
- EACH CORPUS CAVERNOSUM IS SURROUNDED BY A DENSE SHEATH CONTAINING COLLAGEN FIBERS , ELASTIC FIBERS AND SMOOTH MSCLE FIBERS.
- SEPTA – FORM NETWORK – SPACES LINE BY ENDOTHELIUM - BLOOD



**Corpus cavernosum
penis**



Tunica albuginea



Urethra





Aknowledgement

- Inderbir Singh's Textbook of Human Histology
- Textbook of Histology- Atlas and Practical Guide by JP Gunasegaran
- Difiore's Atlas of Histology
- Images from Google
- Histology Text & Atlas -Brijeshkumar