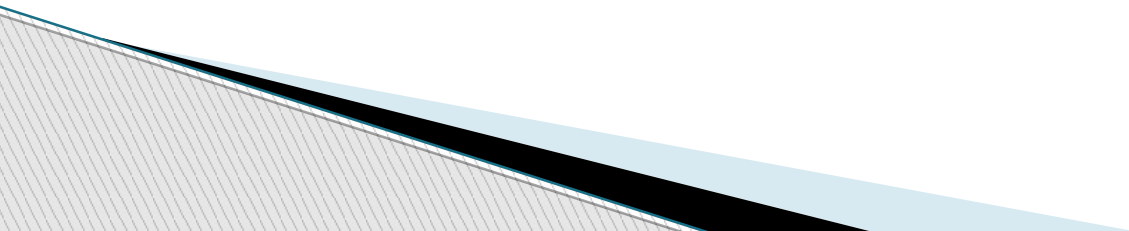


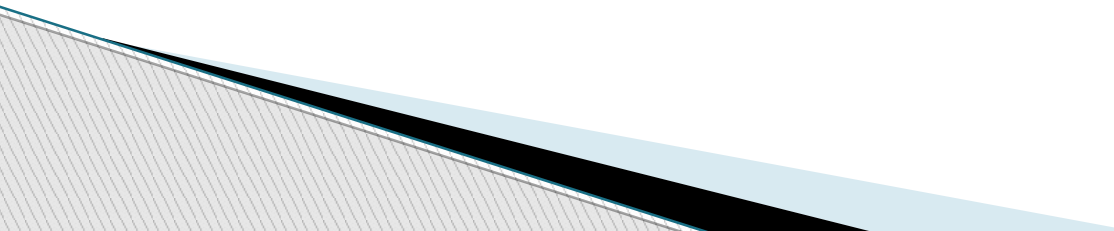
TESTICULAR ATROPHY

Dr. Saima Hashim Khan
Pathology Deptt.
KGMC

ATROPHY



TESTICULAR ATROPHY

- ▶ Testes are the site of spermatogenesis and testosterone production
 - ▶ They are covered by an epithelium on anterior and lateral surface called tunica vaginalis.
 - ▶ Each testis is covered by a layer of fibrous capsule called Tunica Albugenia.
 - ▶ Tunica Aibugenia devide the testis incompletely into various compartments by its septa.
 - ▶ Each compartment is called Testicular Lobule.
- 

NORMAL

Testis H&E

cavity of the tunica vaginalis

tunica albuginea

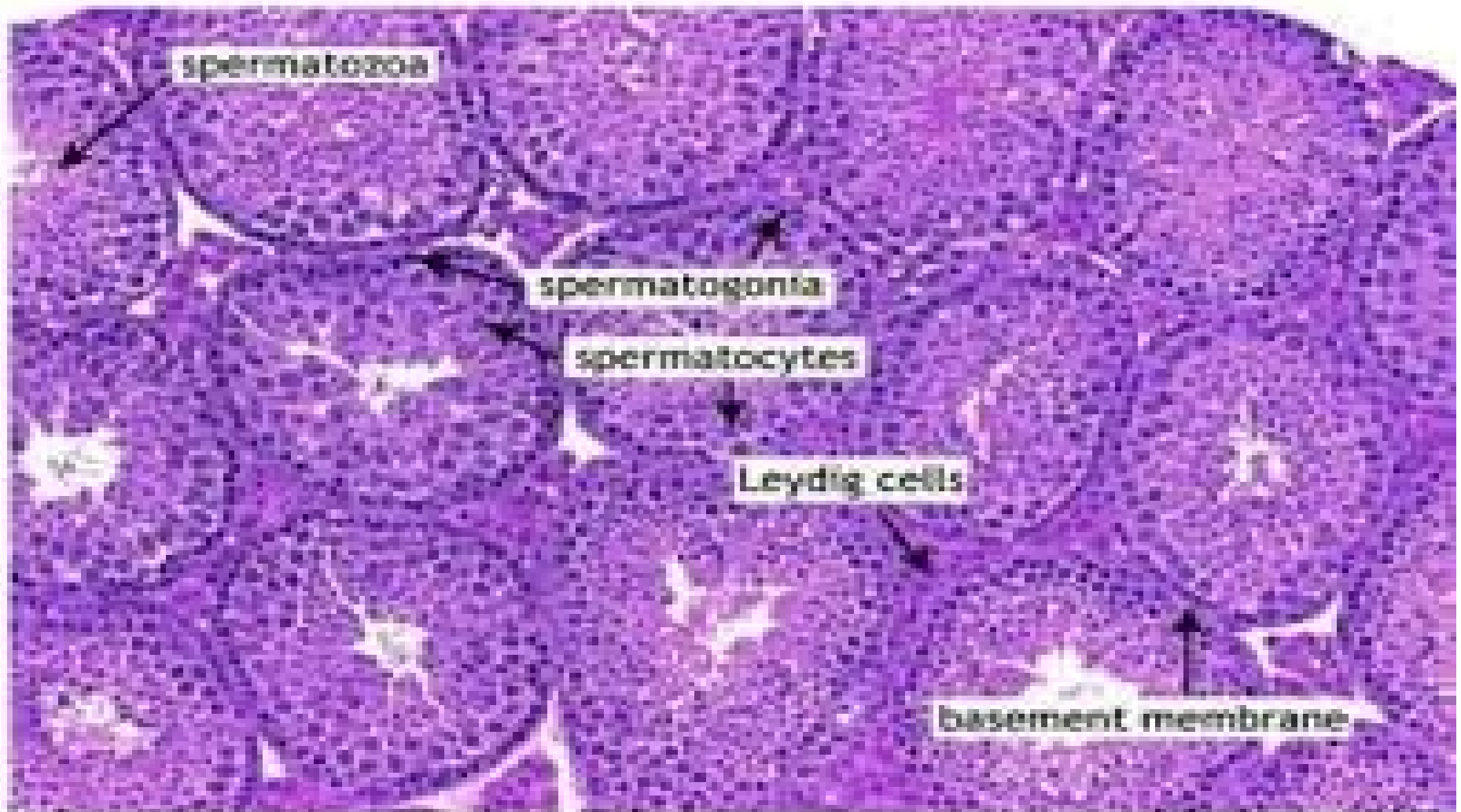
convoluted seminiferous tubules

seminiferous epithelium

interstitial tissue



NORMAL SLIDE





Testis H&E

Leydig cells

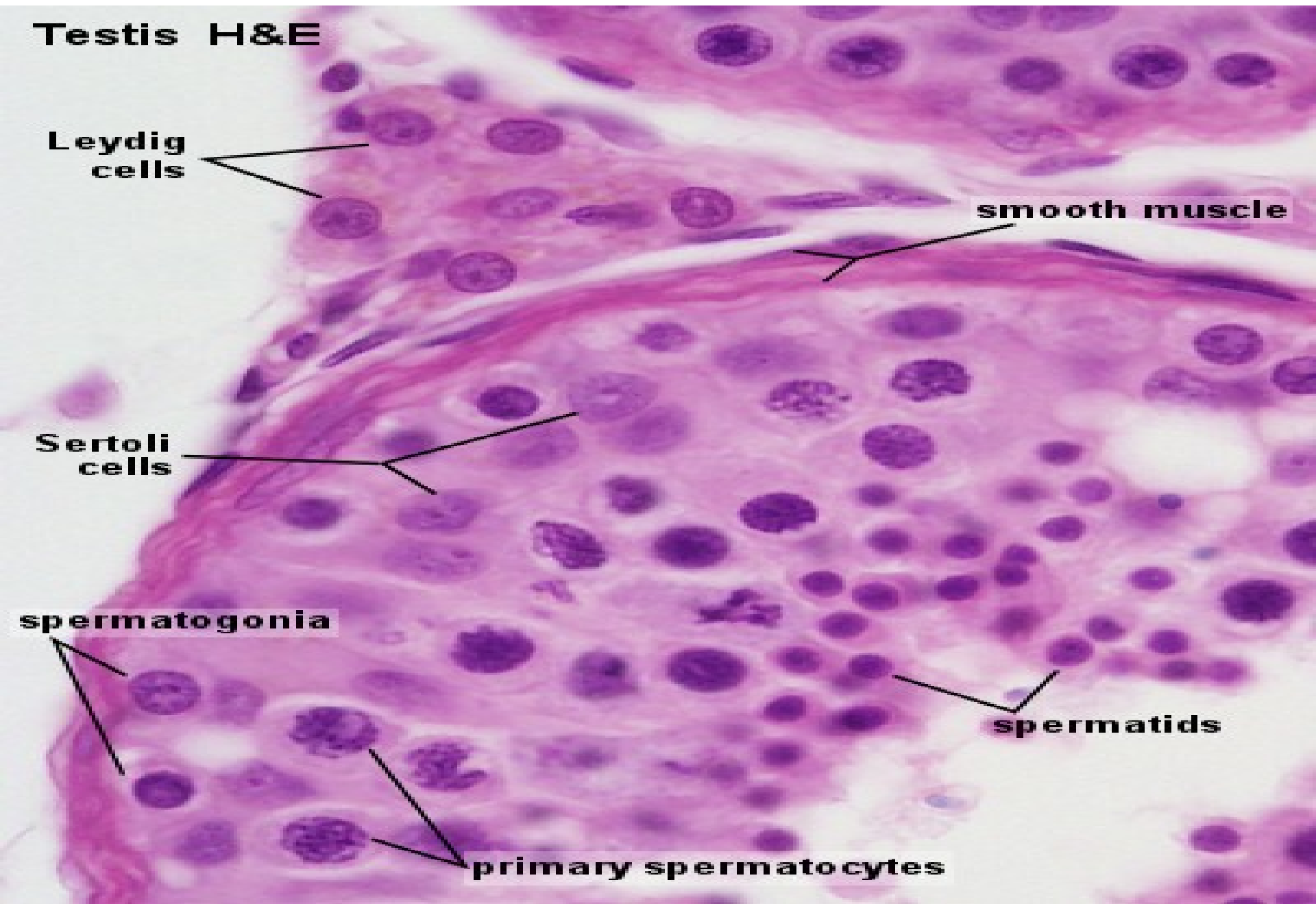
smooth muscle

Sertoli cells

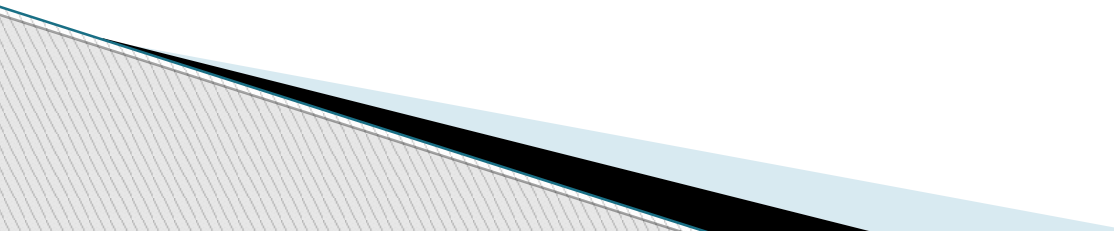
spermatogonia

spermatids

primary spermatocytes



TESTICULAR ATROPHY

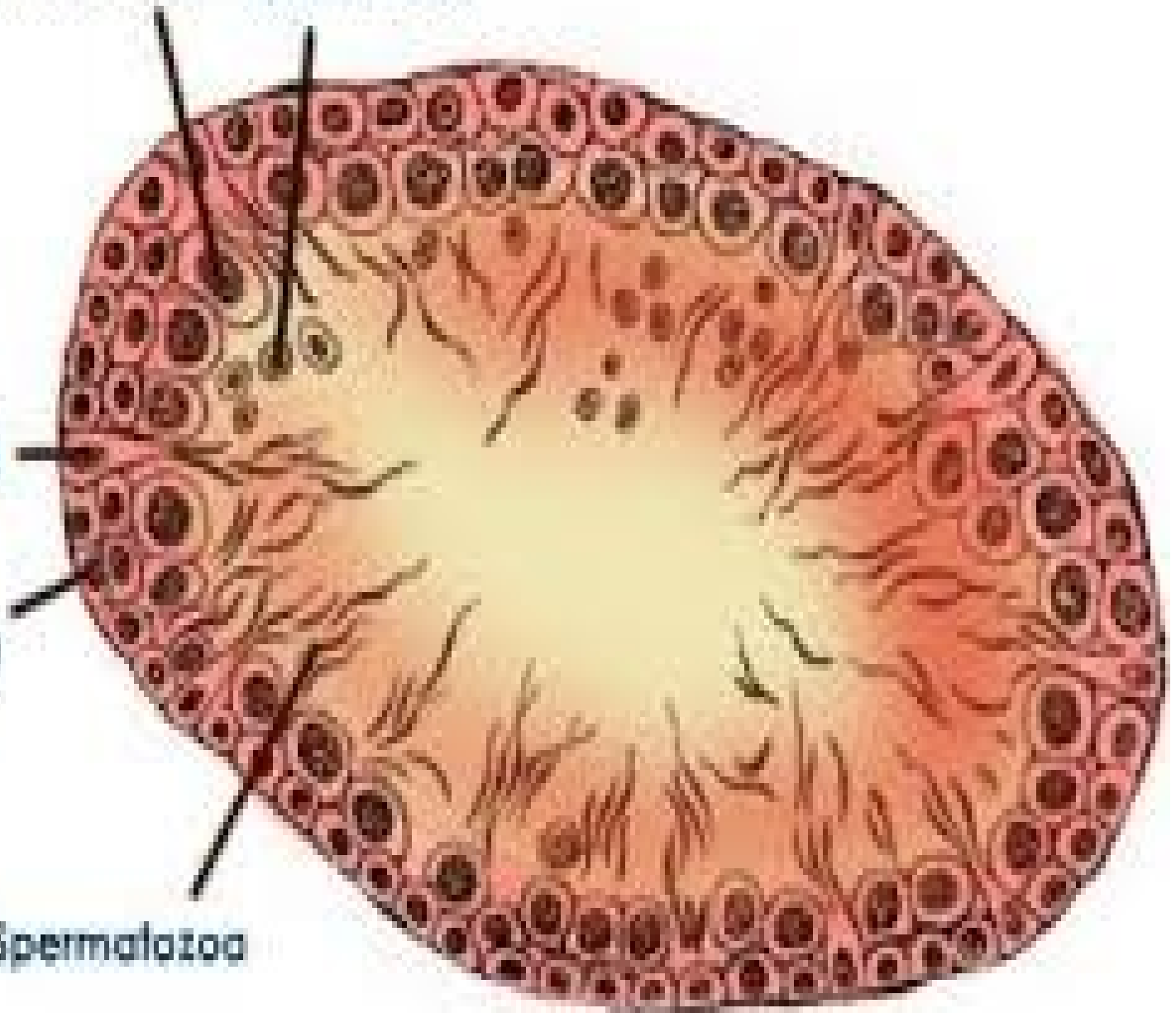
- ▶ There are about 250 testicular lobule and each lobule contain 1 to 4 seminiferous tubule in a loose meshwork of connective tissues that contain lymphatic, nerves and blood vessels.
 - ▶ The loose connective tissue contain Leydig cells which produce testosterone under the effect of LH.
- 

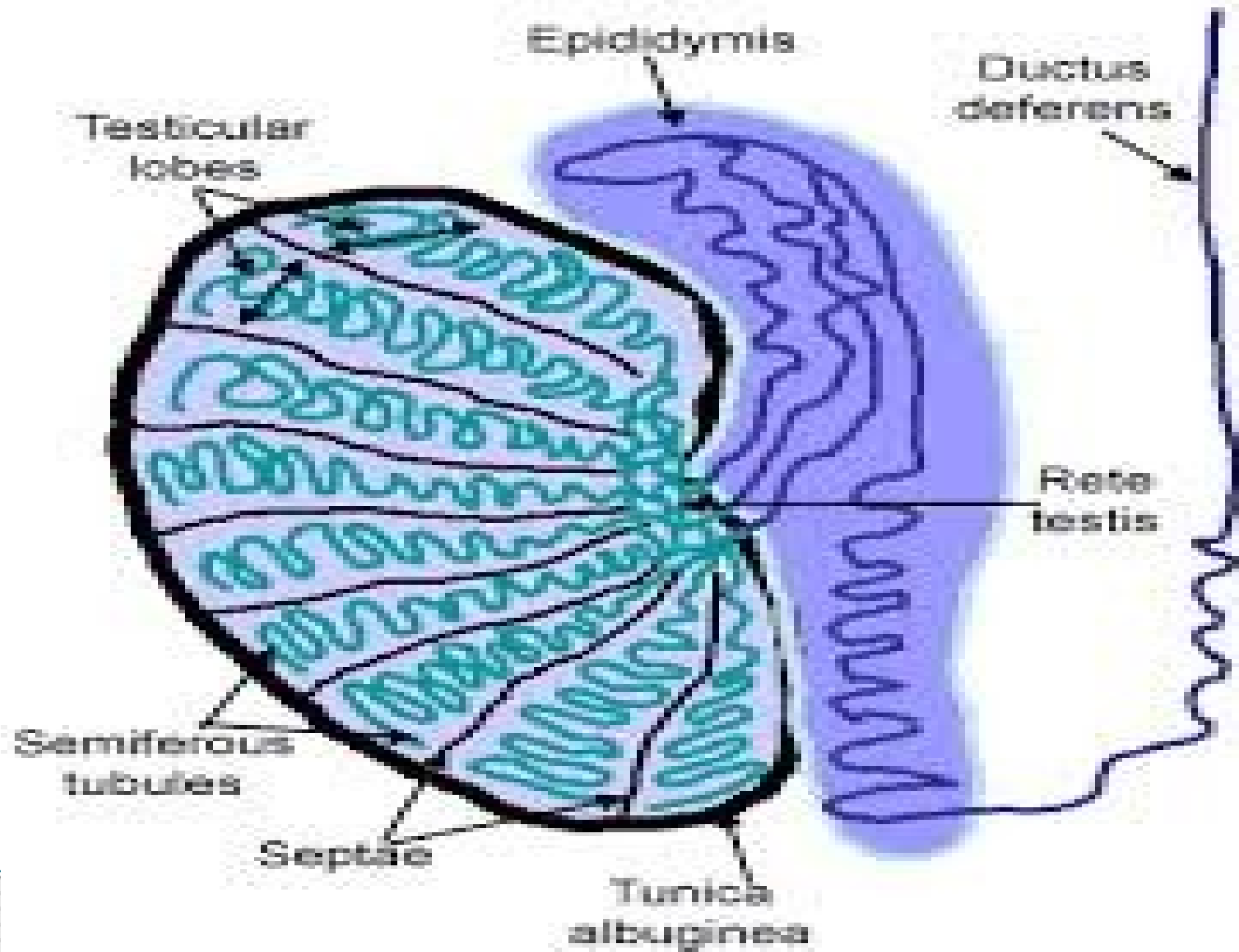
Spermatocyte Spermatids

Cell of Sertoli

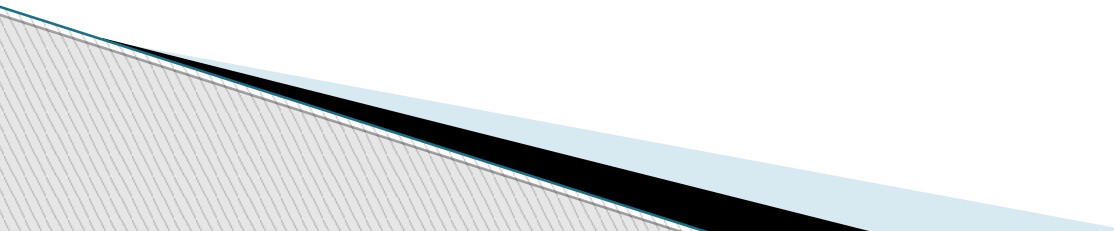
Spermatogonia

Spermatozoa





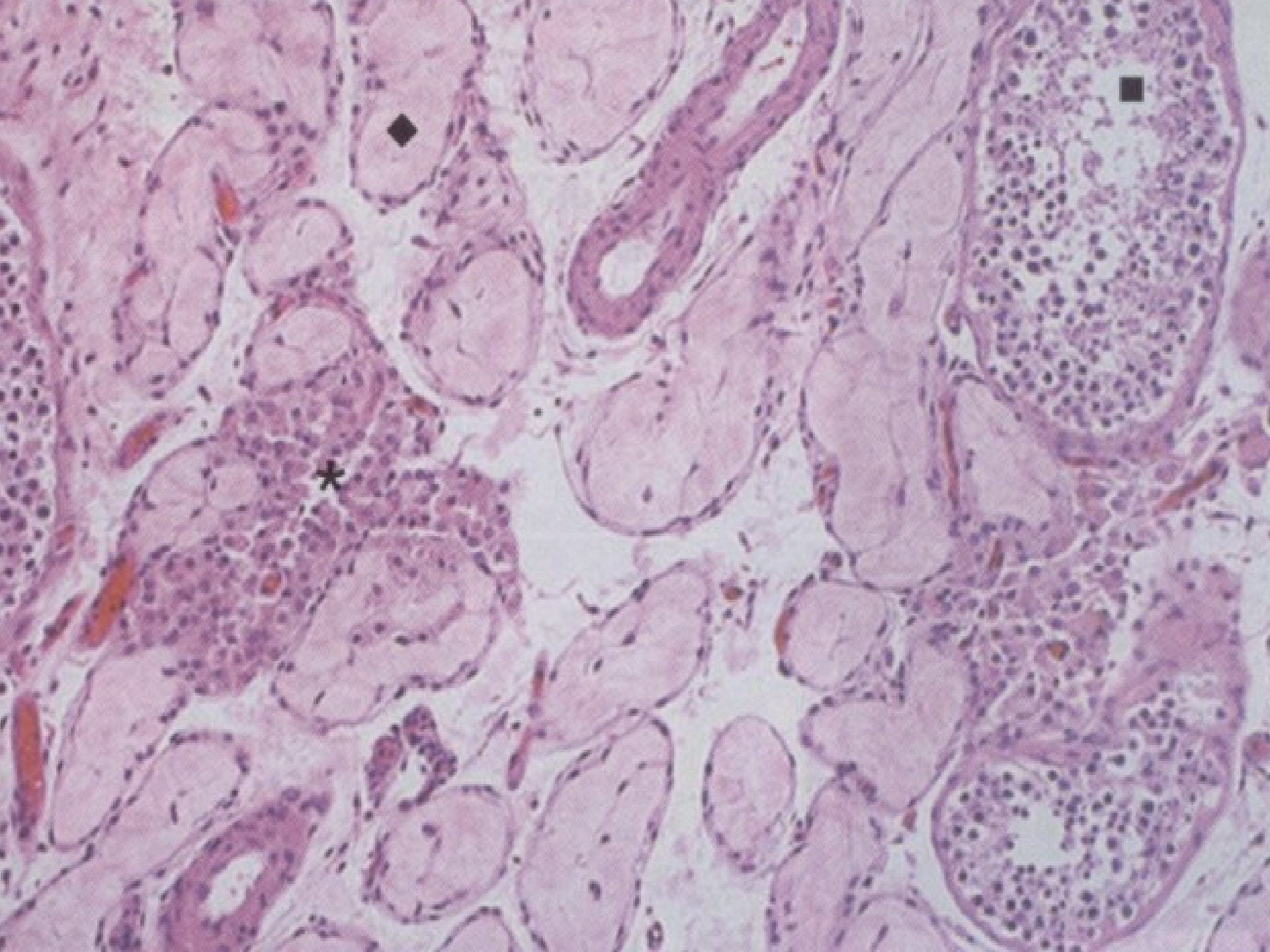
CAUSES OF TESTICULAR ATROPHY

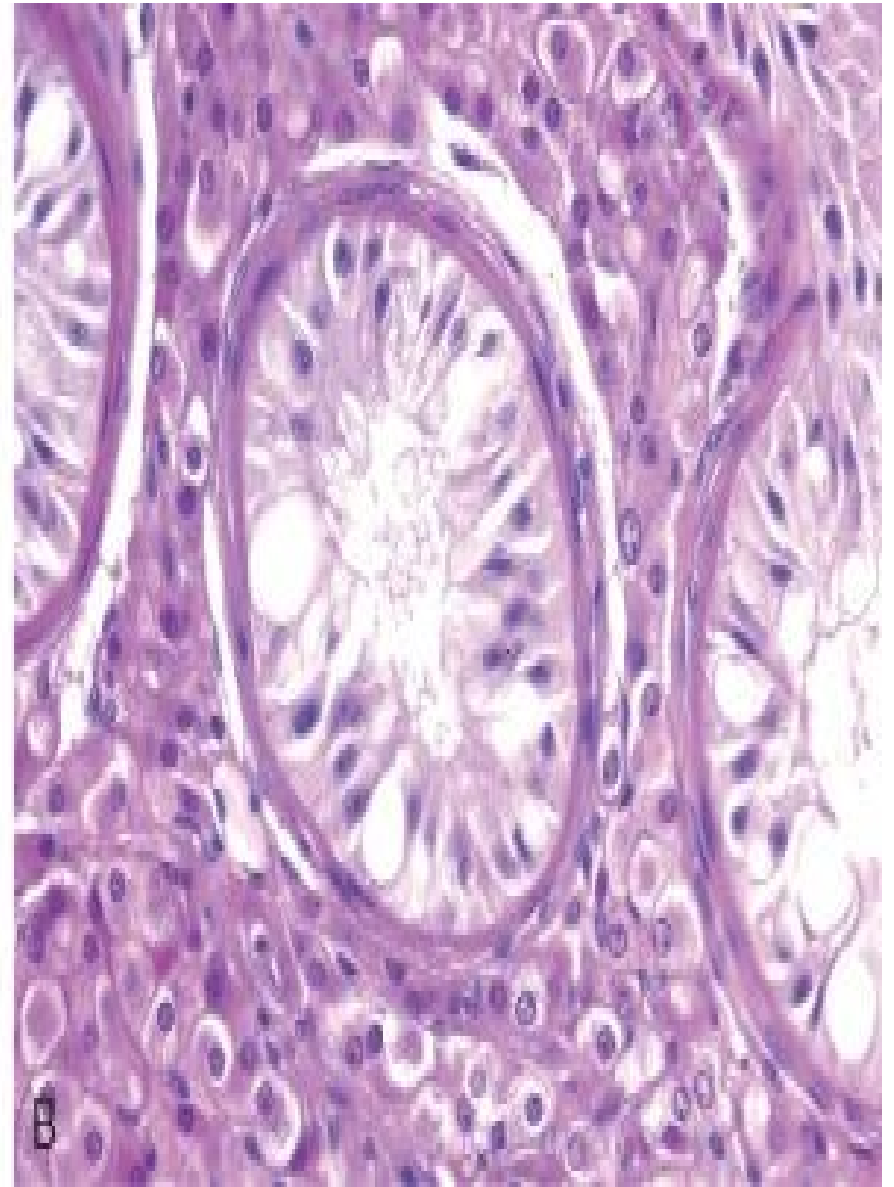
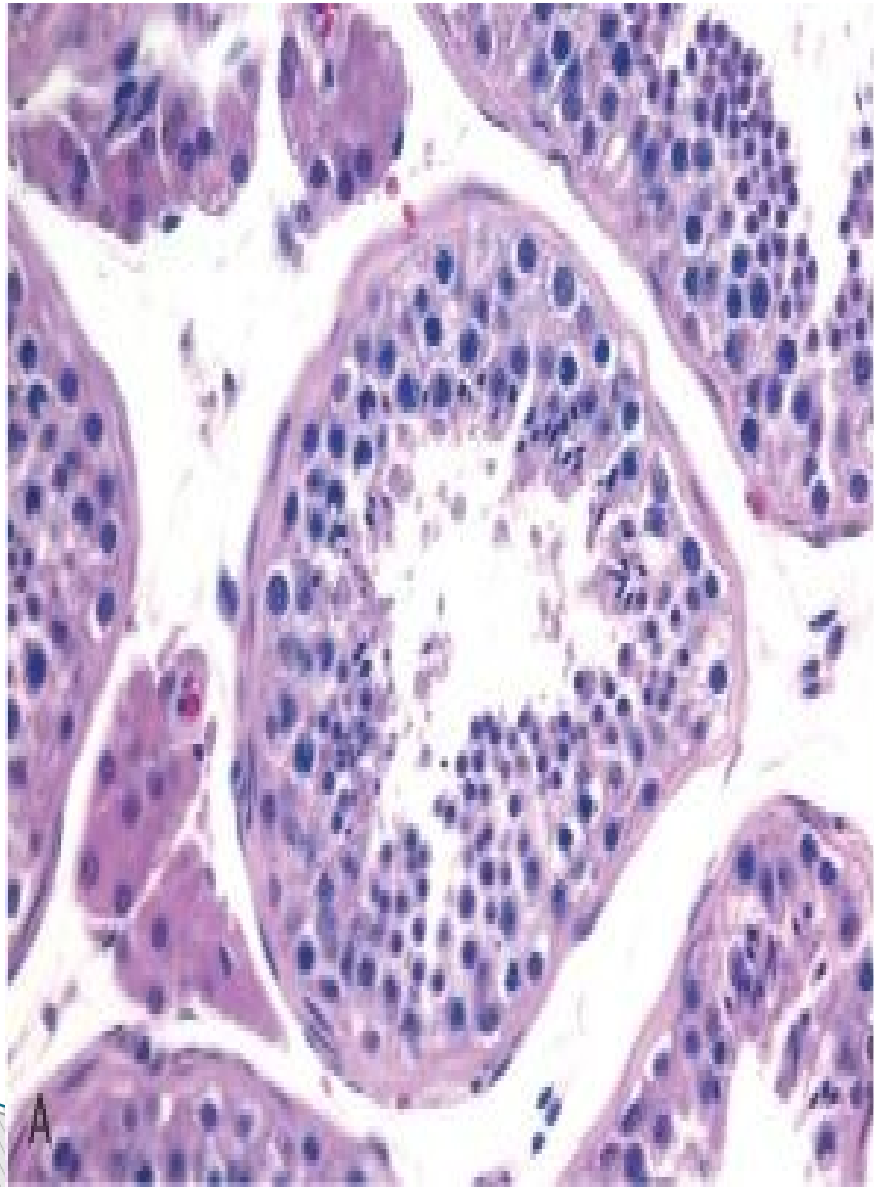
- ▶ Hormonal abnormalities
 - ▶ Intrinsic testicular abnormalities
 - ▶ Mechanical
 - ▶ Chronic ischemia
 - ▶ Radiation
 - ▶ Liver cirrhosis
 - ▶ Prolong administration of female hormone
- 

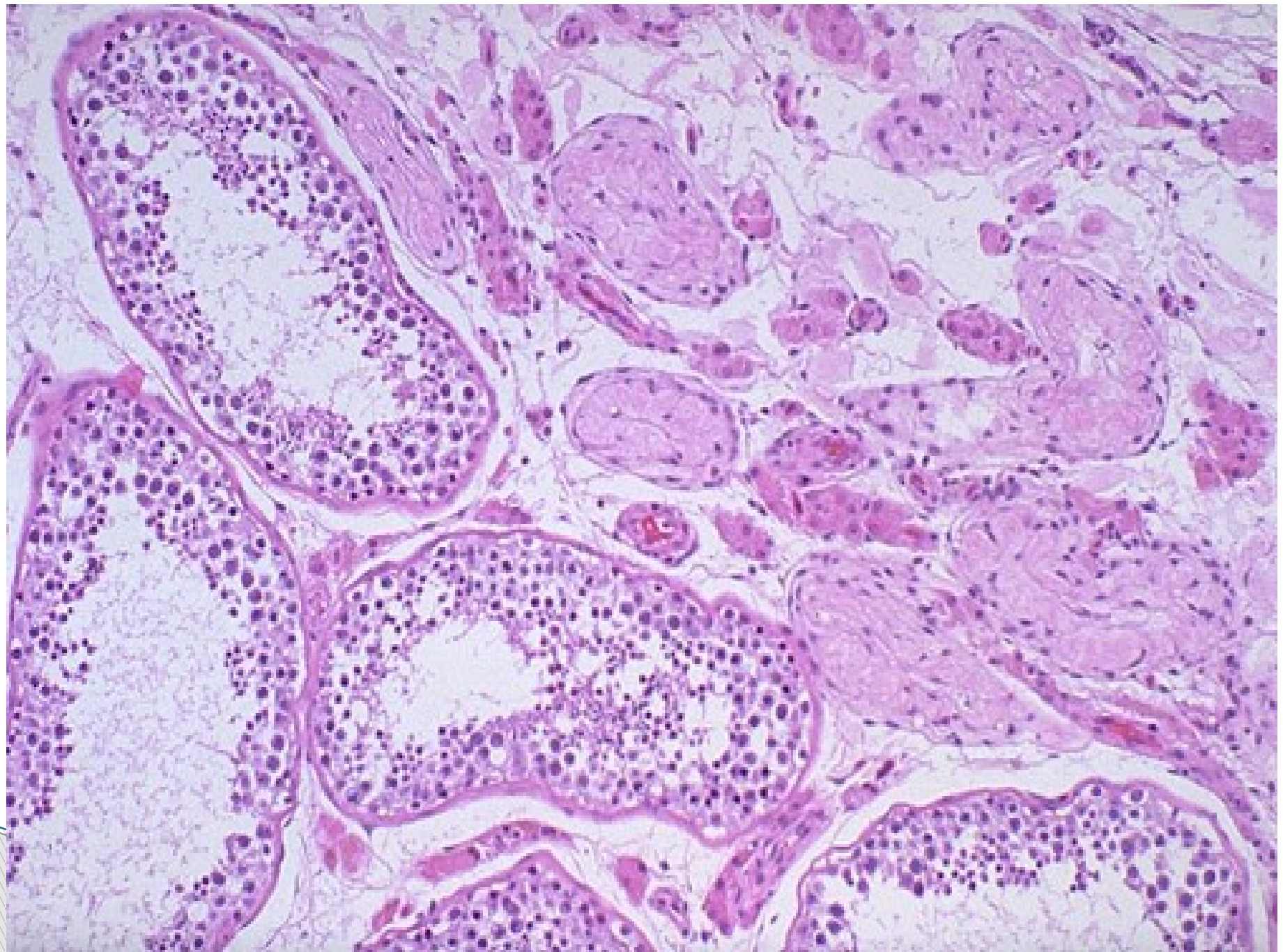
MORPHOLOGY

- ▶ Testis small in size and firm in consistency
- ▶ Loss of tubules
- ▶ No. of cell layers lining the seminiferous tubules are decreased.
- ▶ Compensatory hyperplasia of interstitial cells.
- ▶ There is progressive depletion of germ cell elements. The tubular basement membrane is thickened and there is peritubular fibrosis. Some tubules may show hyalinisation.

- ▶ **ATROPHIED TESTES WITH
HYALINIZATION SLIDES**









Thank you!