



CONTINUING EDUCATION IN TOXICOLOGIC PATHOLOGY REPRODUCTIVE SYSTEM

Third Conference

ORGANIZED BY SOCIETY FOR TOXICOLOGIC PATHOLOGY IN INDIA (STPI)

OCTOBER 29-31, 2010

The Atria Hotel, # 1, Palace Road, Bangalore - 560 001



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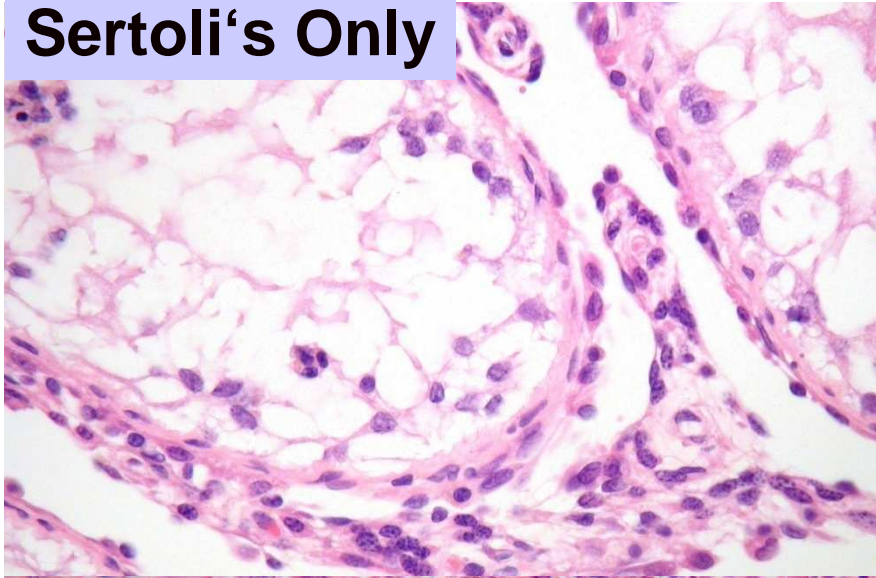
Vishnu Traders



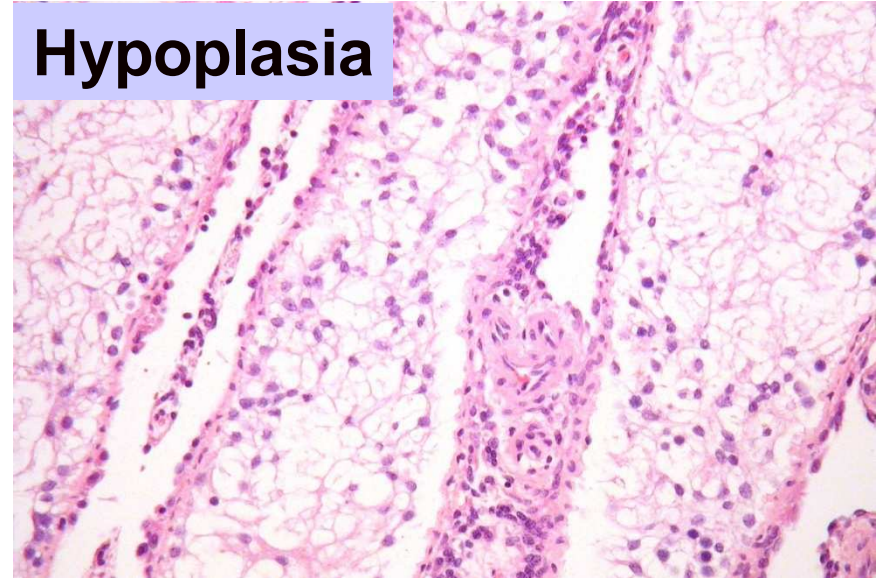
RCC
Linking science to progress

Spontaneous lesions: RccHan™:WIST

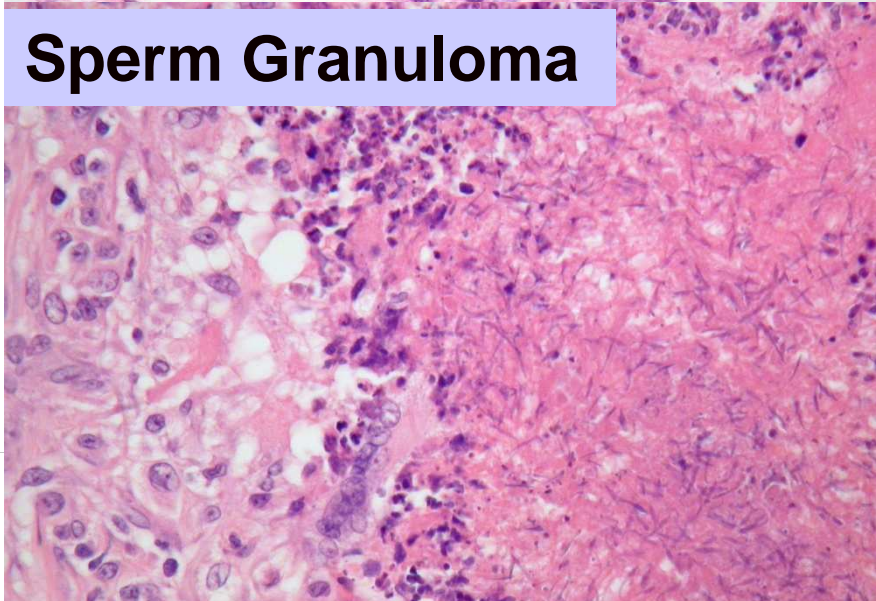
Sertoli's Only



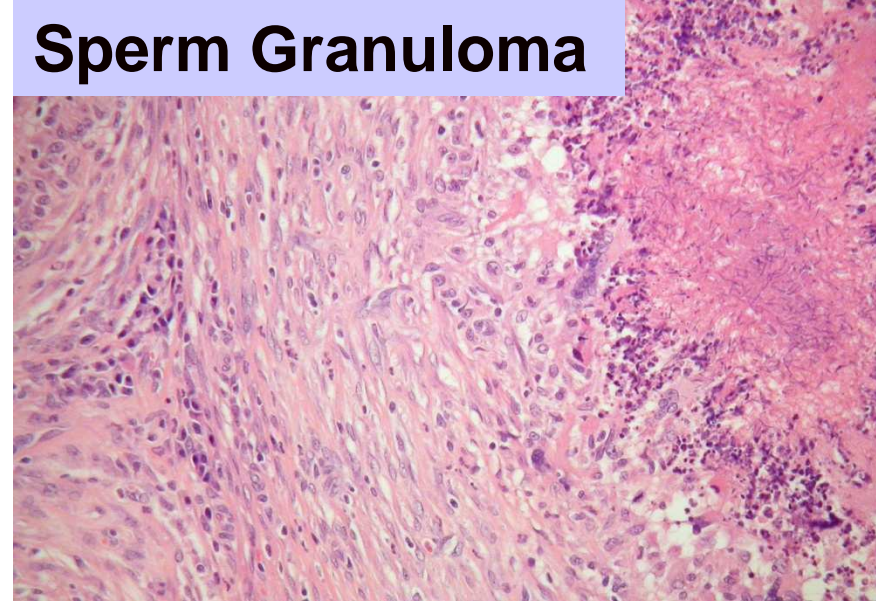
Hypoplasia



Sperm Granuloma

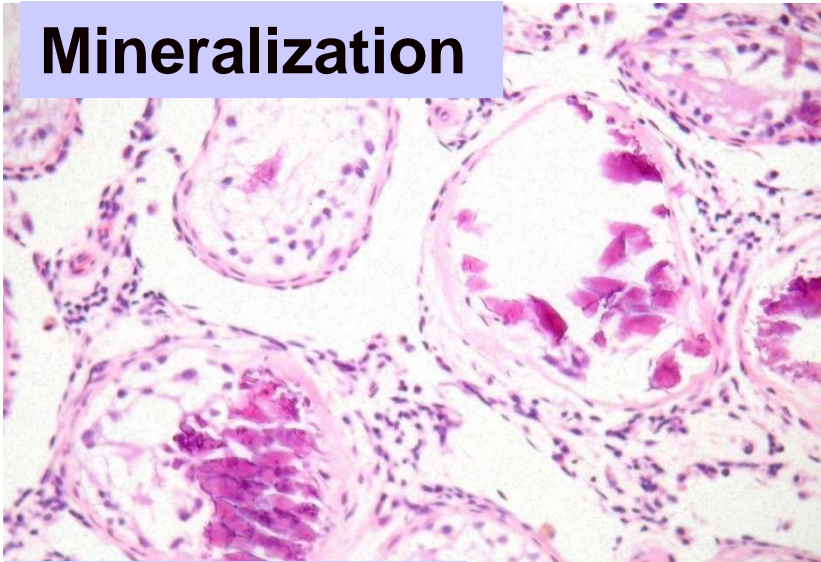


Sperm Granuloma

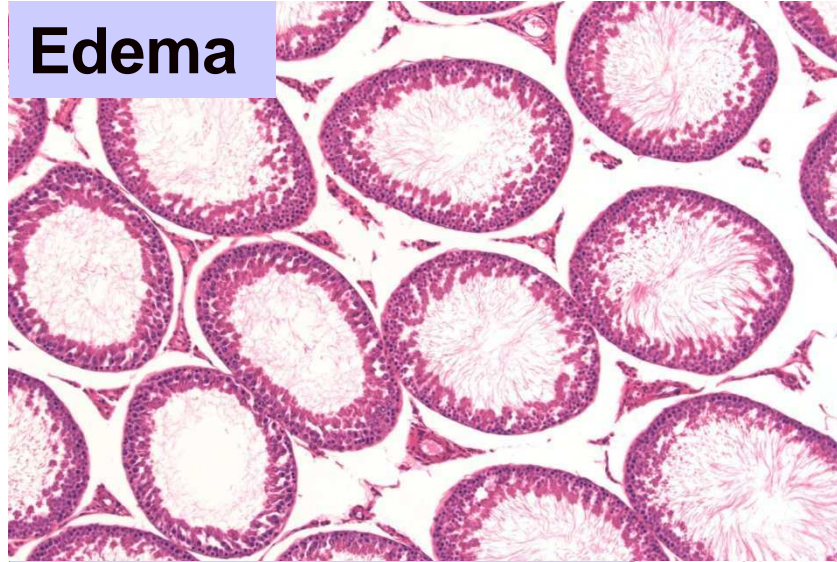


Spontaneous lesions: RccHanTM:WIST

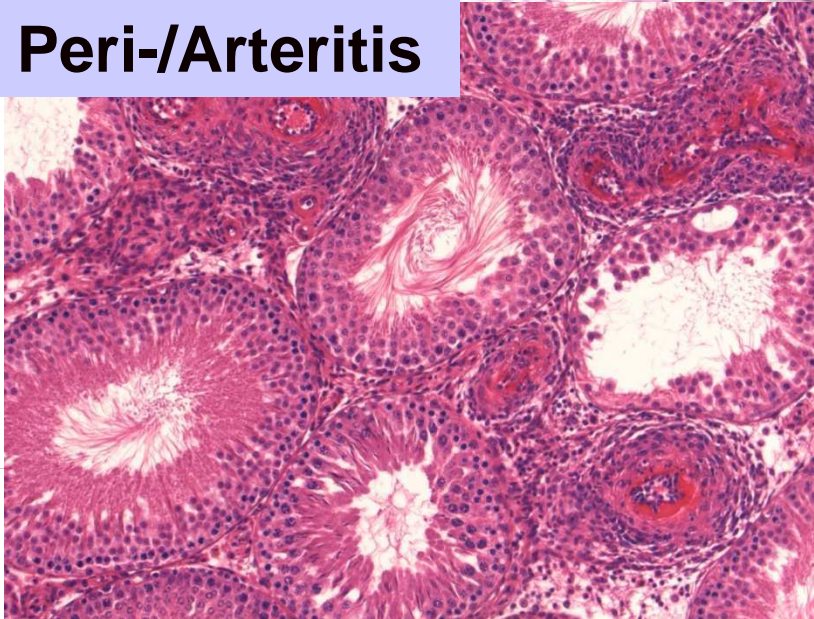
Mineralization



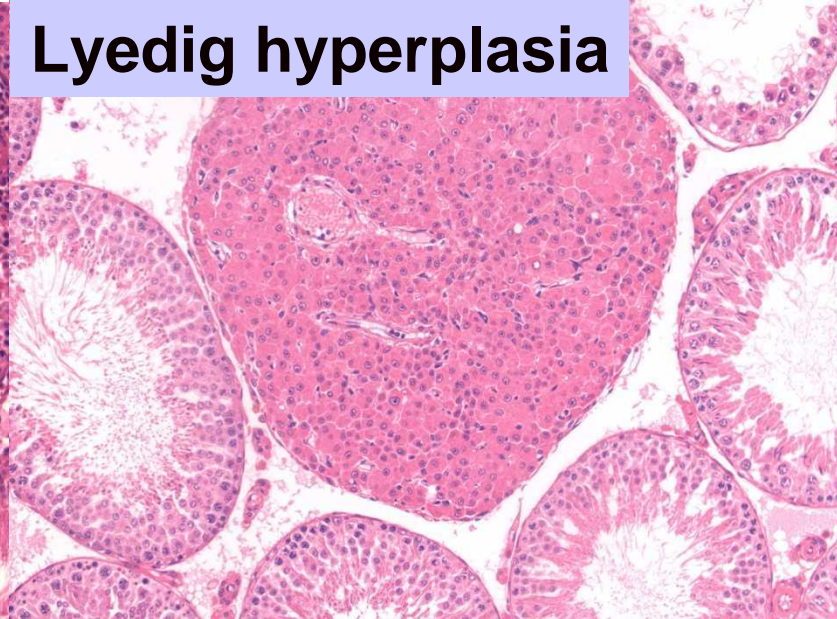
Edema



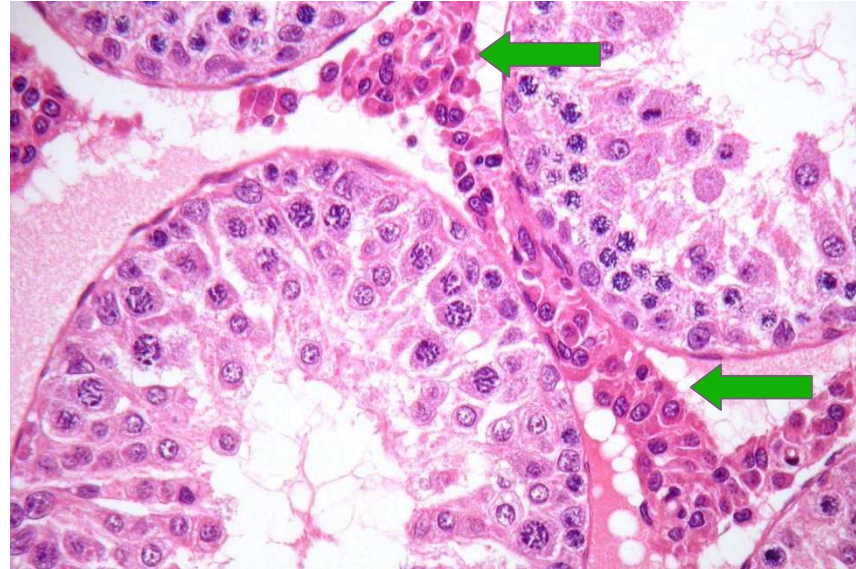
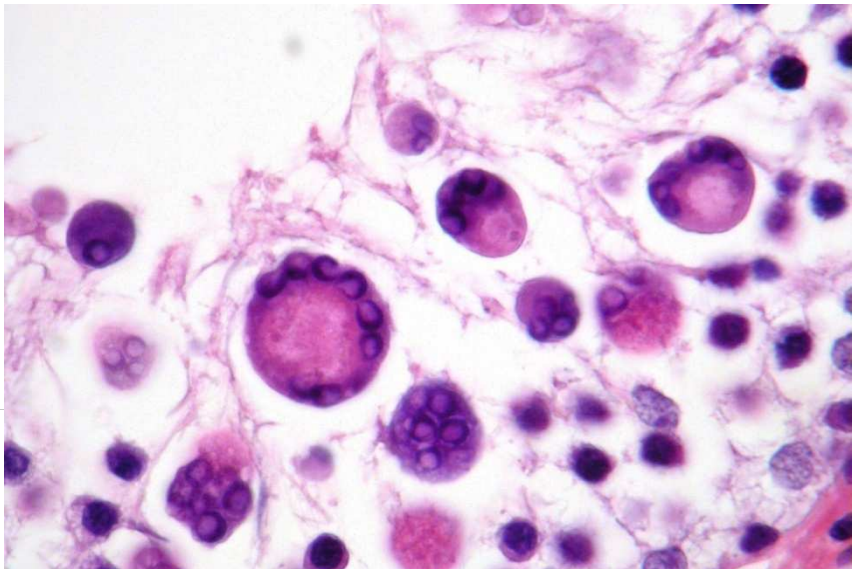
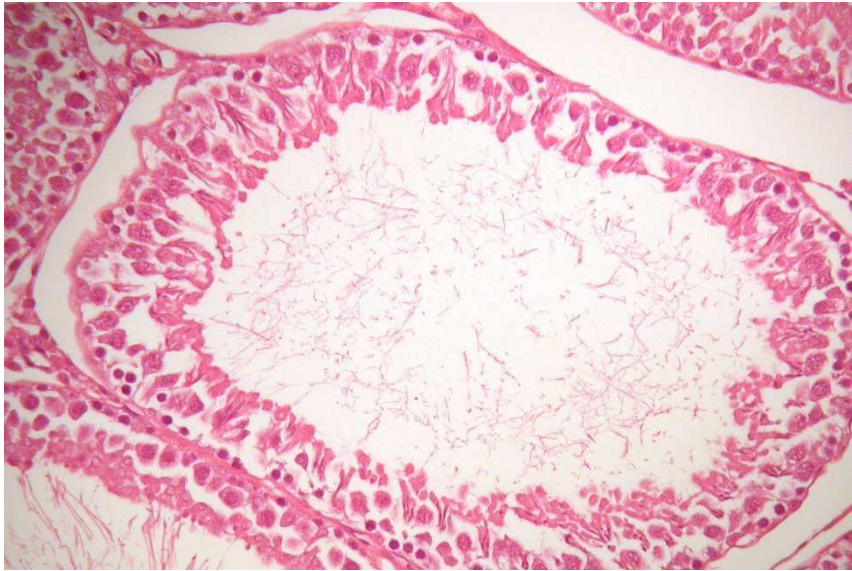
Peri-/Arteritis



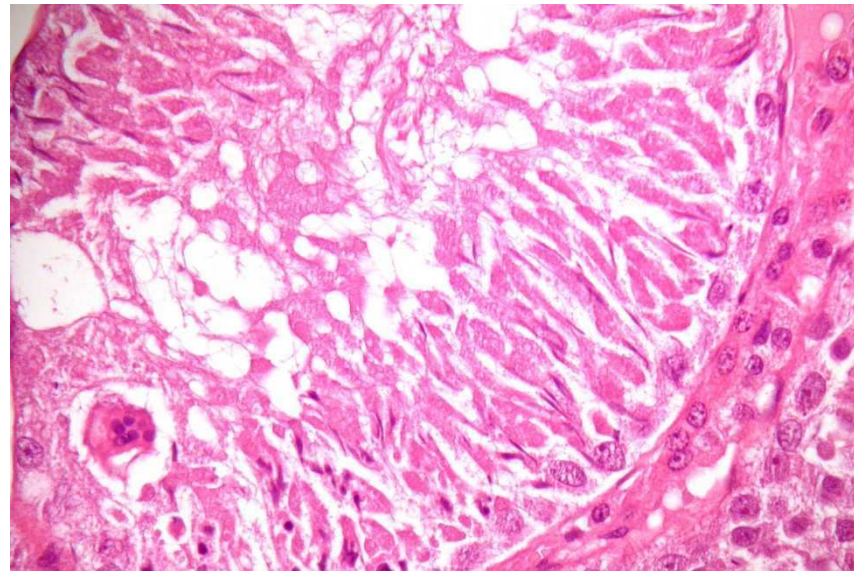
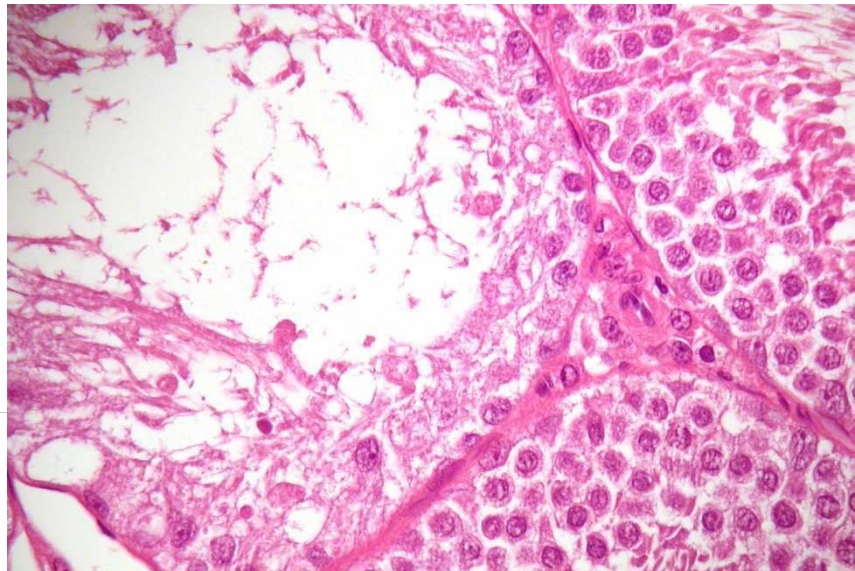
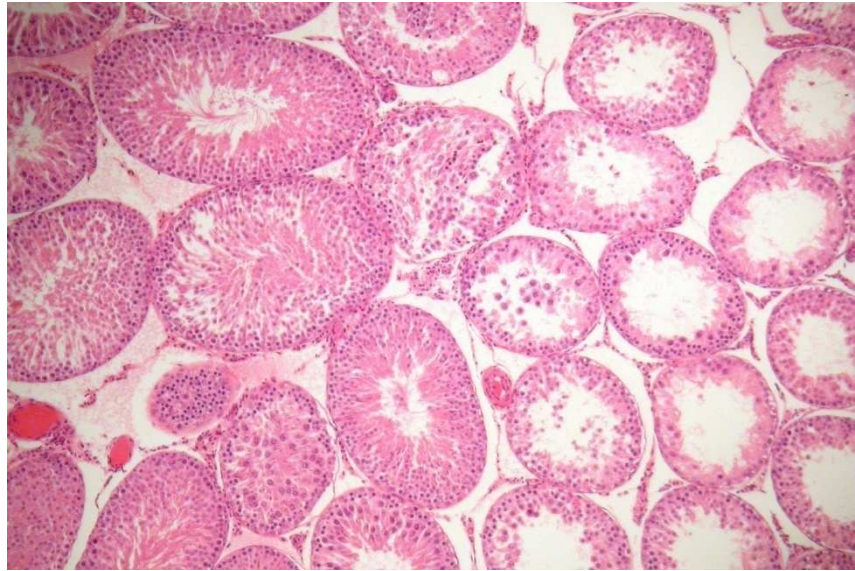
Leydig hyperplasia



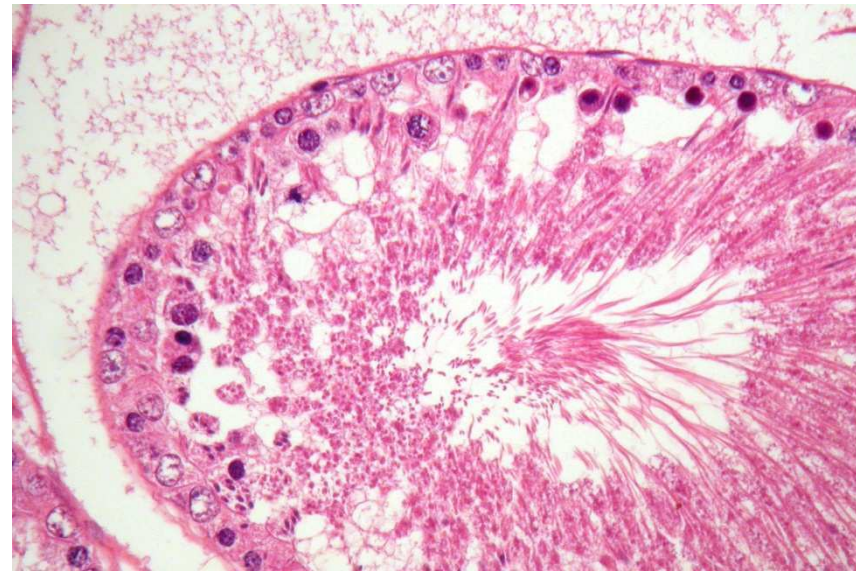
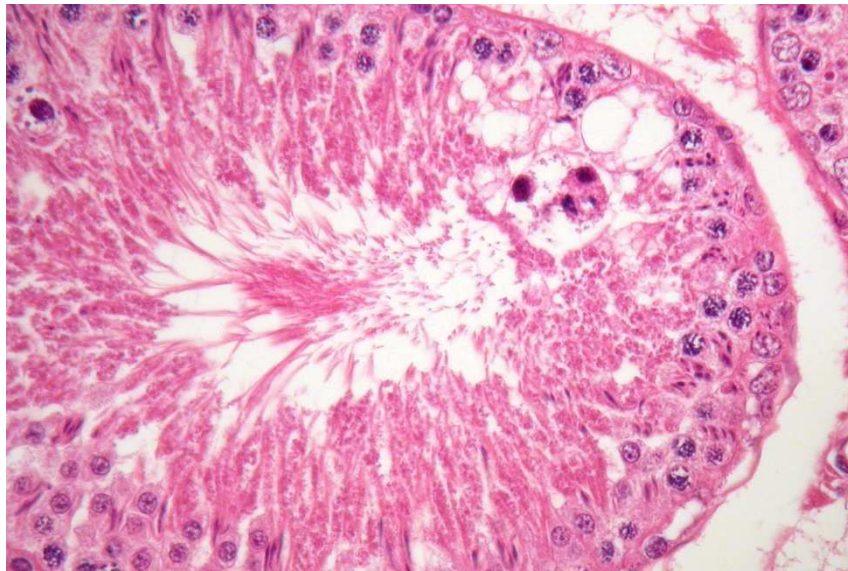
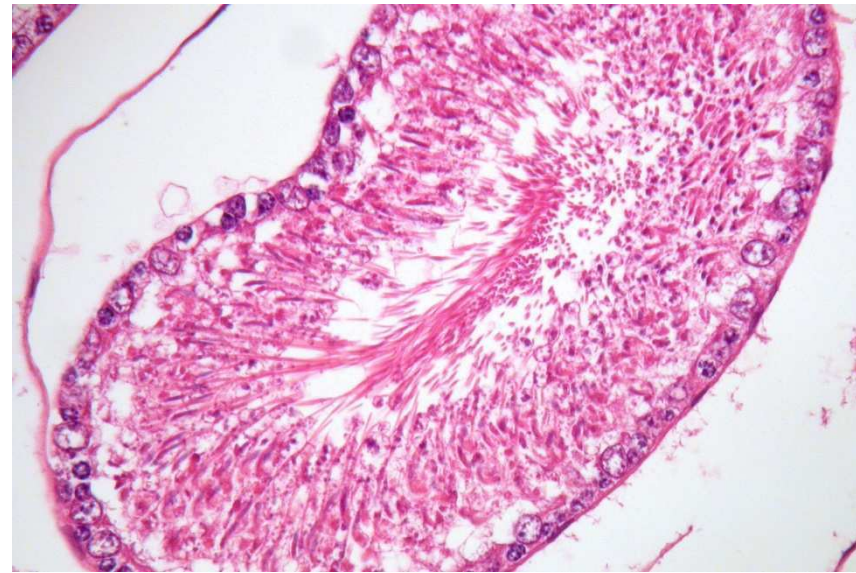
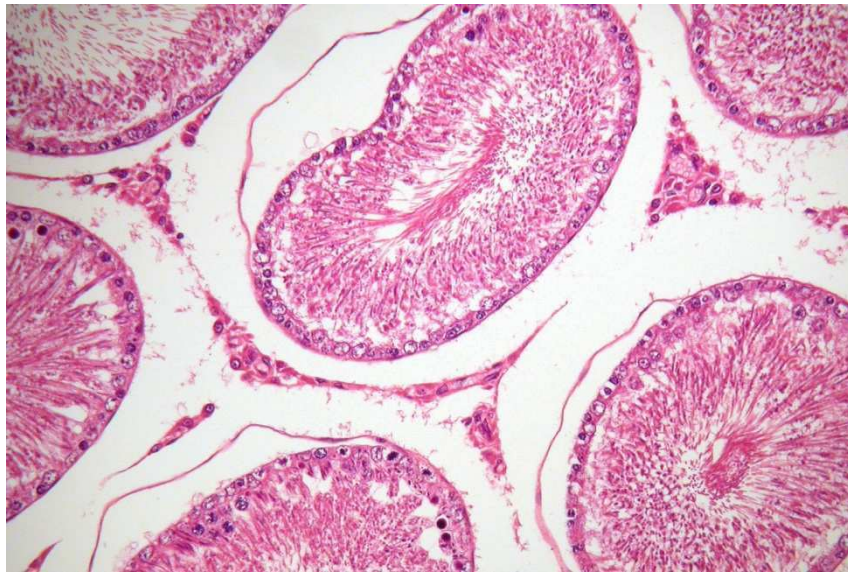
Induced lesions: RccHanTM:WIST



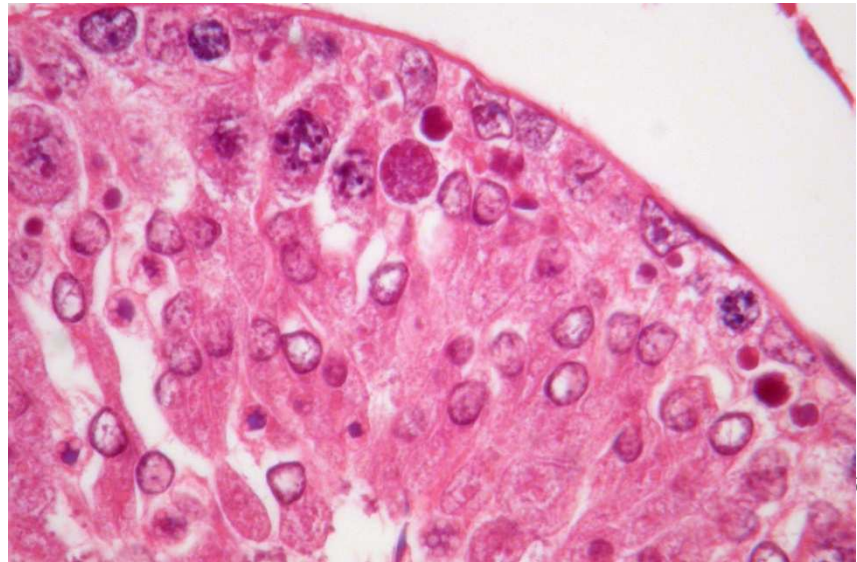
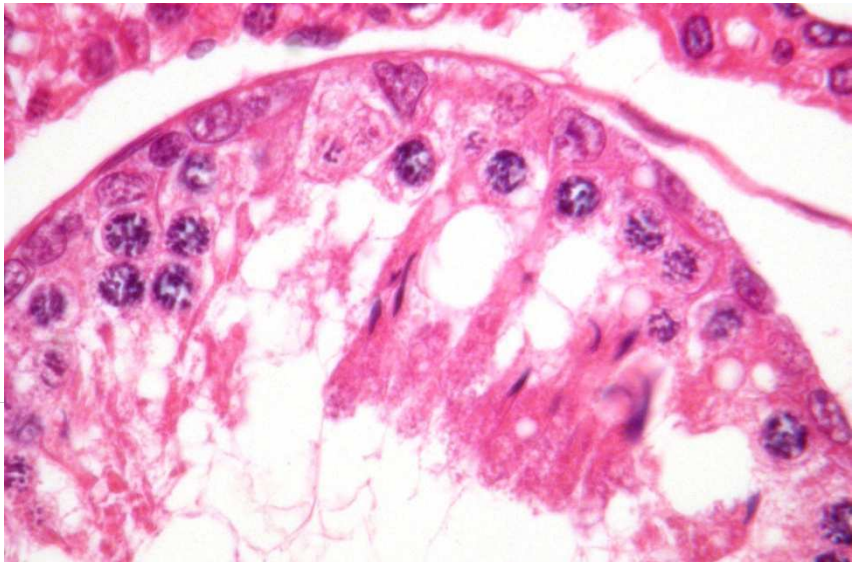
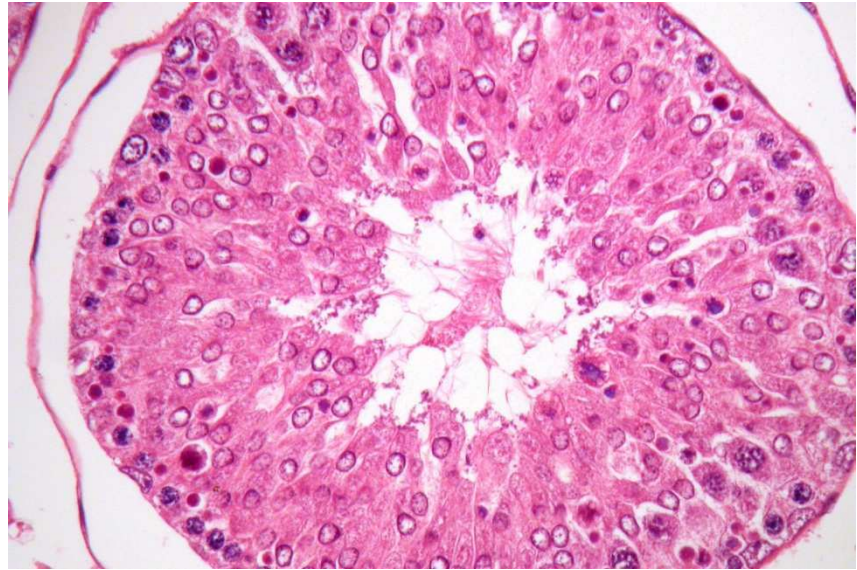
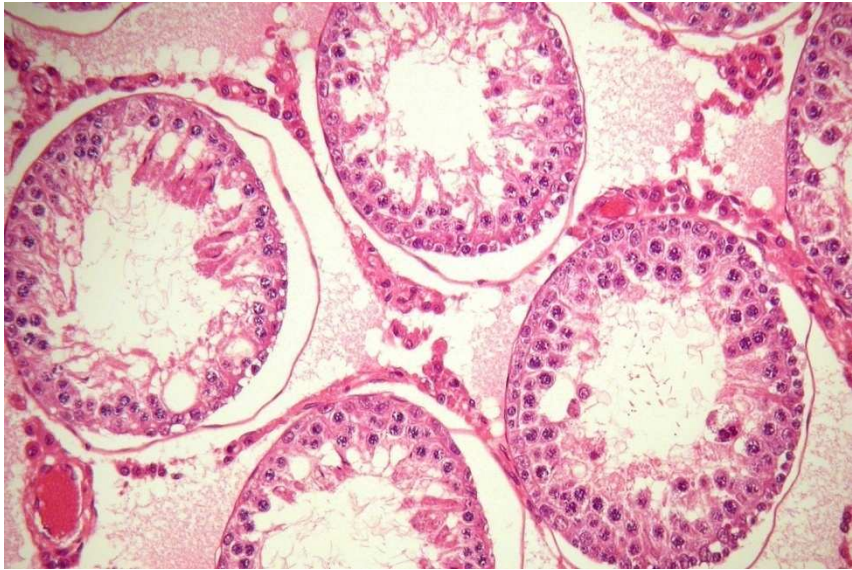
Induced lesions: RccHan™:WIST – PDE4-Inhibitor



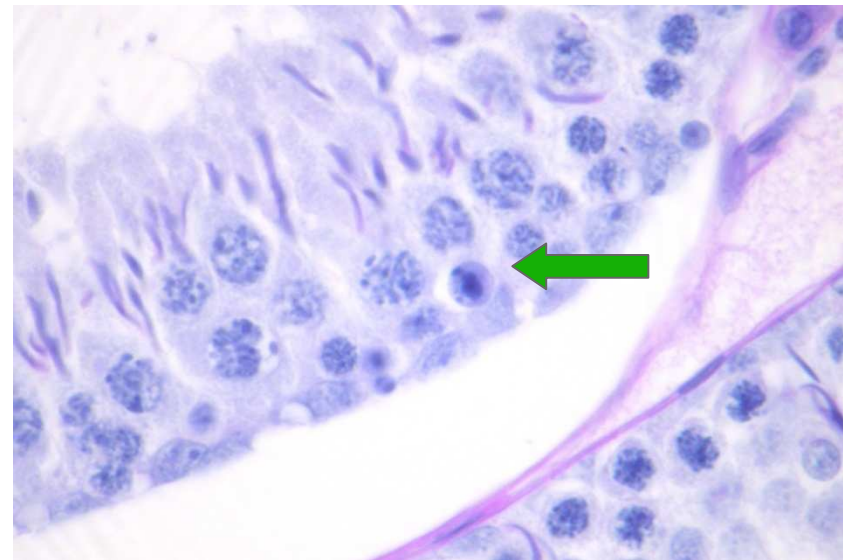
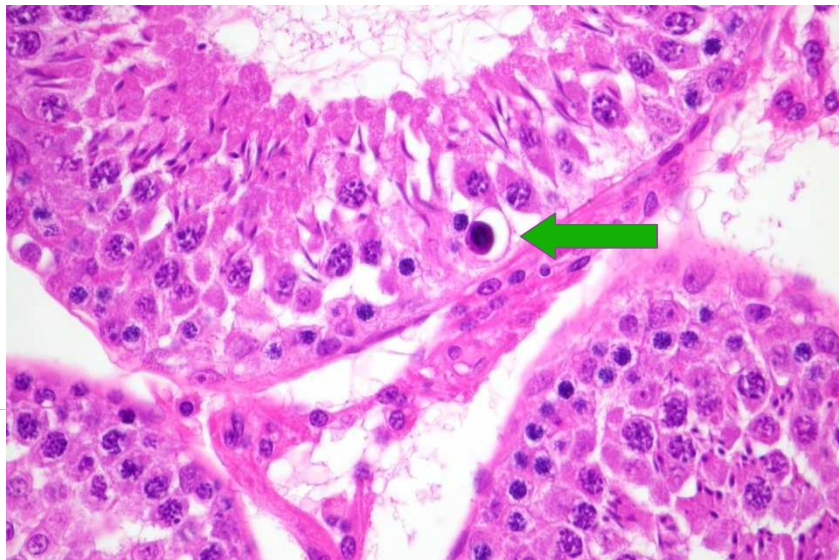
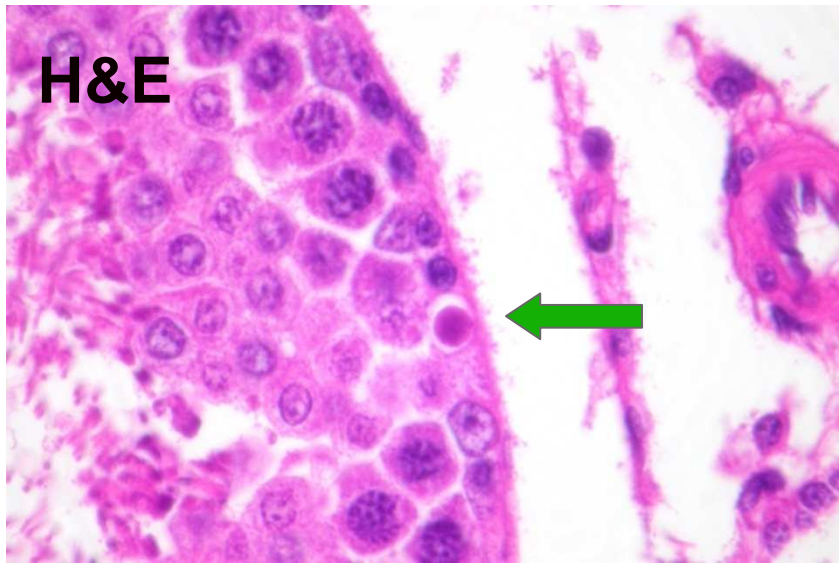
Induced lesions: RccHan™:WIST – Neuroleptic (4-W)



Induced lesions: RccHan™:WIST – Neuroleptic (Rec.)



Induced apoptosis: RccHanTM:WIST – Chemical Ind.



Spontaneous lesions: Beagle

Rehm S. Spontaneous testicular lesions in purpose-bred beagle dogs. Toxicol Pathol. 2000, 28:782-787.

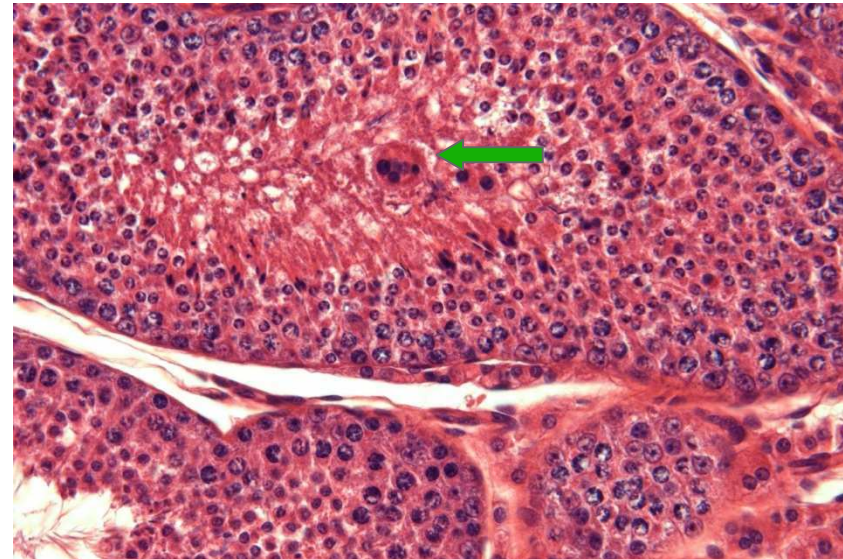
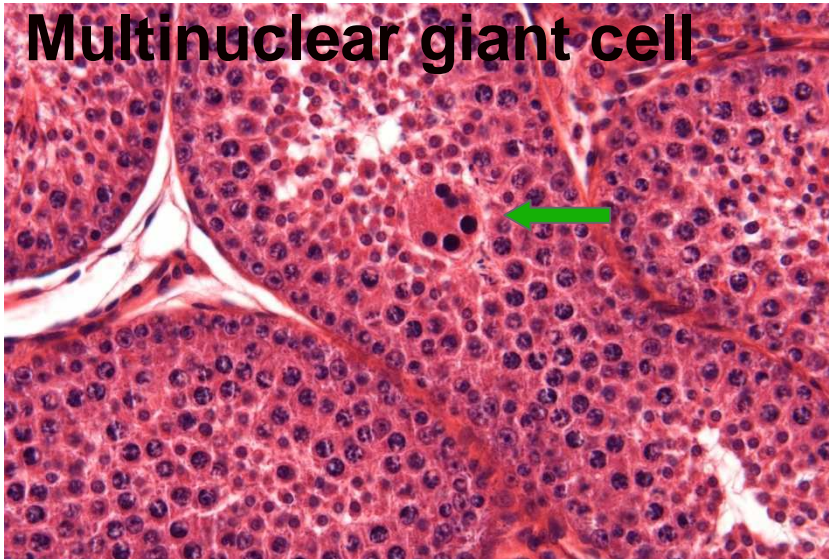
... **most significant** finding was bilateral **segmental hypospermatogenesis in (30%)** of the dogs. .. occasionally **associated with giant cells, with cellular debris, and in 40% with atrophic tubules** devoid of germ cells... Focal subcapsular tubular atrophy or **hypoplasia** (tubules lined by Sertoli cells only) found in **26%** of dogs without hypospermatogenesis. Inhibited spermiation with retention of mature sperm in tubules was seen in In conclusion, about 30% of control beagle dogs show segmental hypospermatogenesis, which may be associated with degenerative changes....,

Spontaneous lesions (selected): DOBE

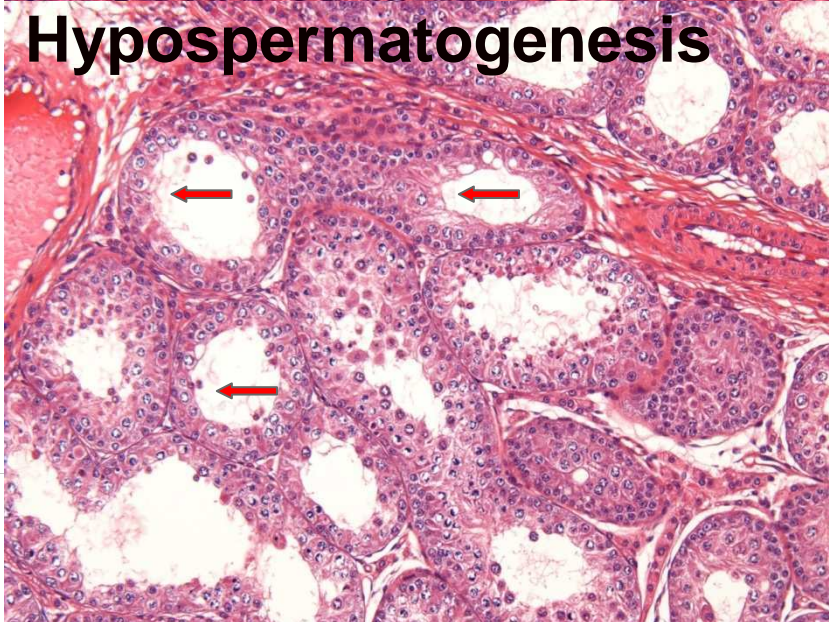
Study Type	Finding	n	Mean	SD	Min	Max
26-Week	Immature	33	5.55	12.4	0	33.3
	Giant cells		44.4	31.4	0	83.3
	Vacuolation		13.9	24.4	0	66.7
	Hypospermatogenesis		2.78	6.2	0	16.7
	Degeneration		12.51	9.3	0	25.0
52-Week	Segmental hypoplasia	87	1.04	4.17	0	16.7
	Giant cells		8.85	24.6	0	33.3
	Vacuolation		7.29	25.1	0	100.0
	Degeneration		12.65	11.7	0	50.0
	Granuloma		1.04	4.17	0	16.7
	Mononuclear foci		1.04	4.17	0	16.7
	Inflammation		1.04	4.17	0	16.7

Spontaneous lesions: DOBE

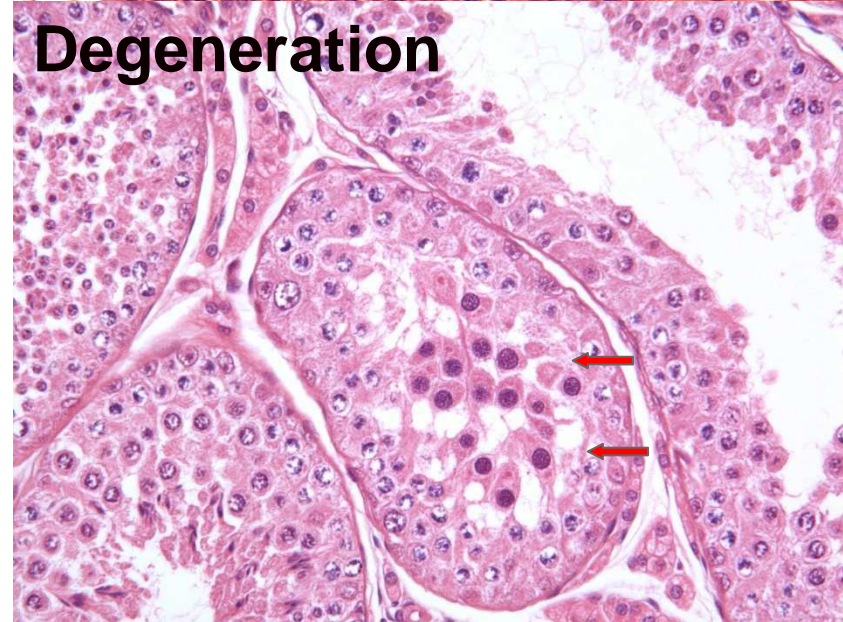
Multinuclear giant cell



Hypospermatogenesis

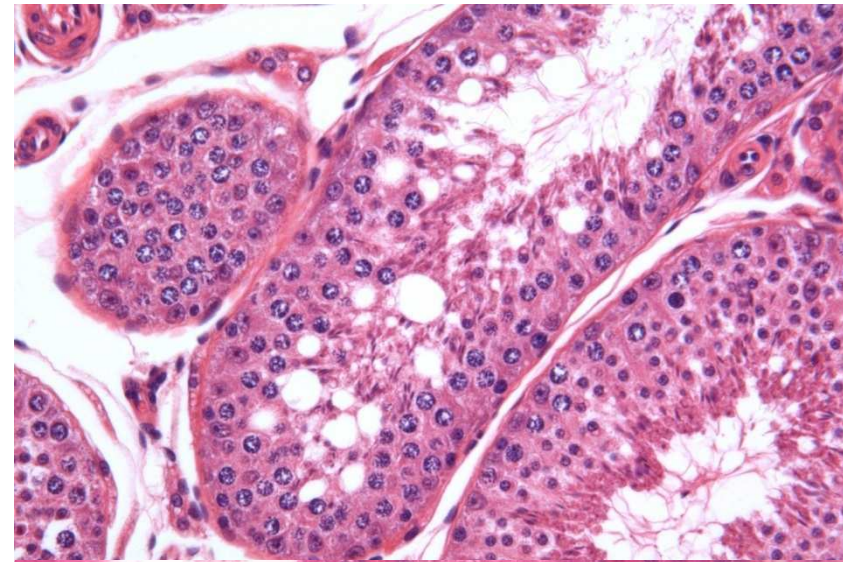
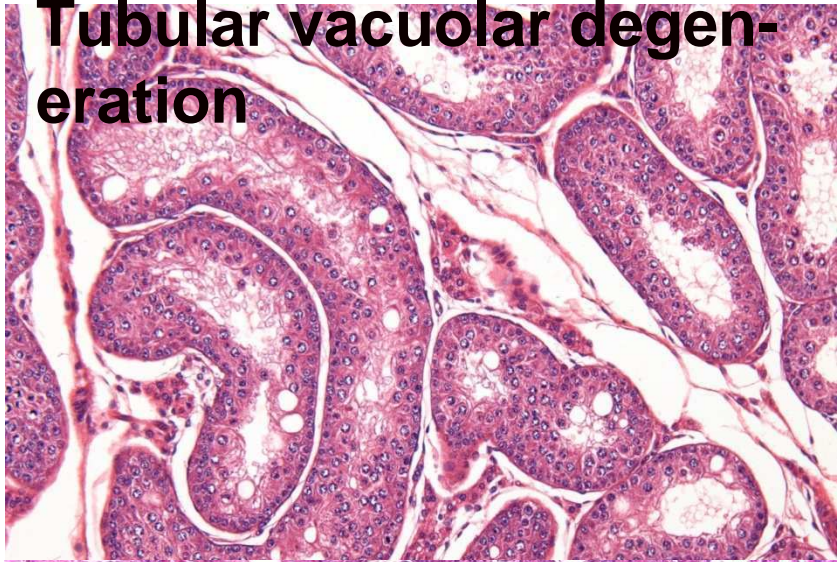


Degeneration

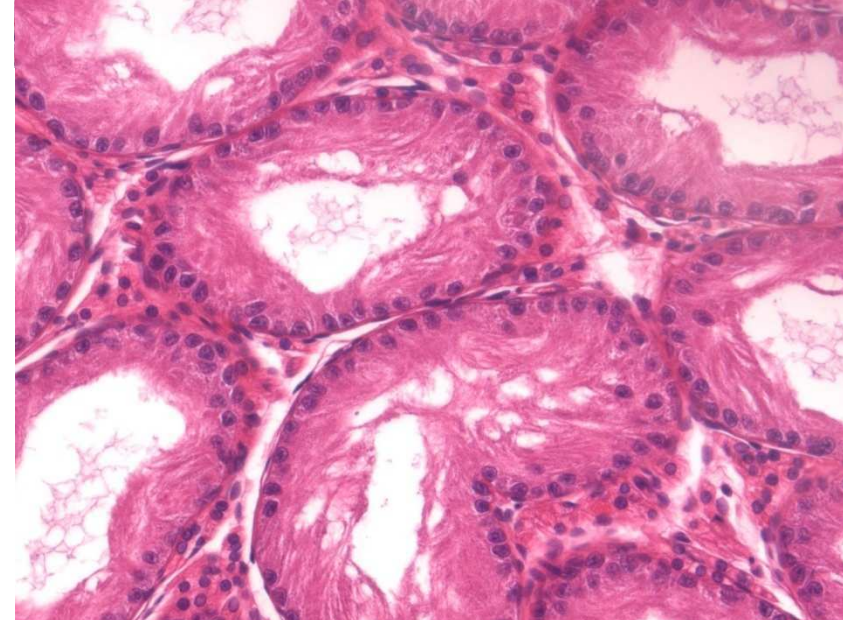
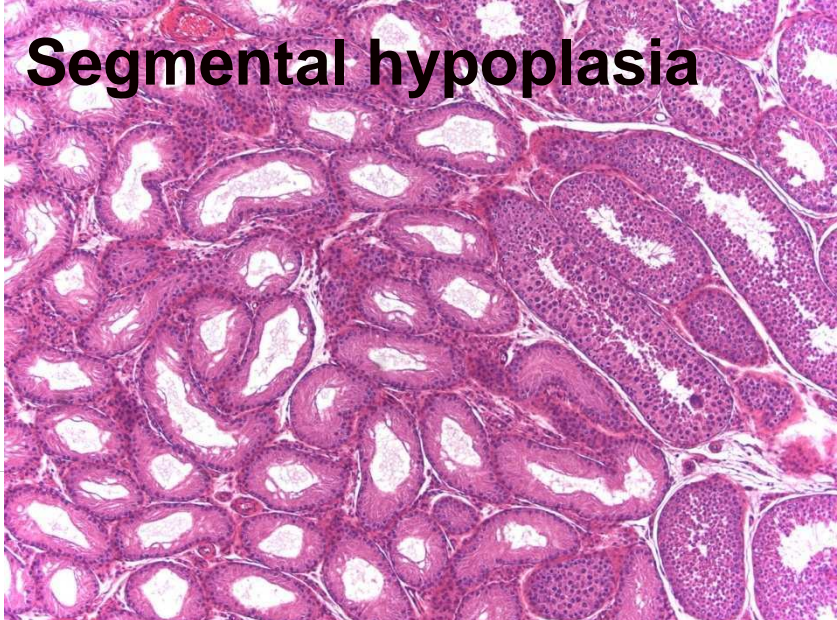


Spontaneous lesions: DOBE

Tubular vacuolar degeneration

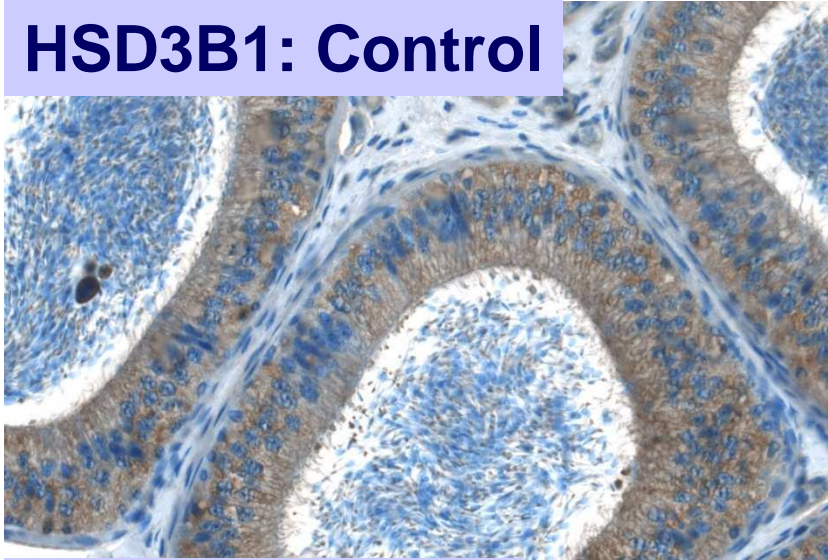


Segmental hypoplasia

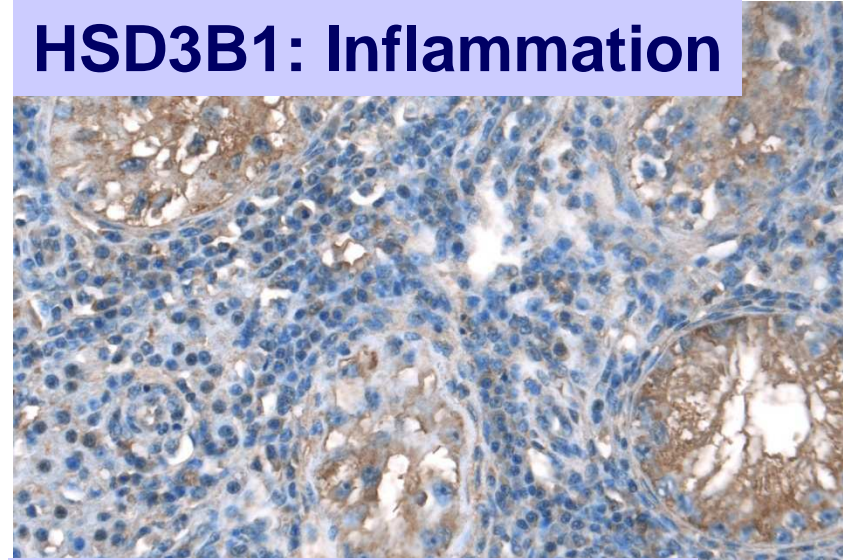


Spontaneous lesions: Marshall (USA)

HSD3B1: Control



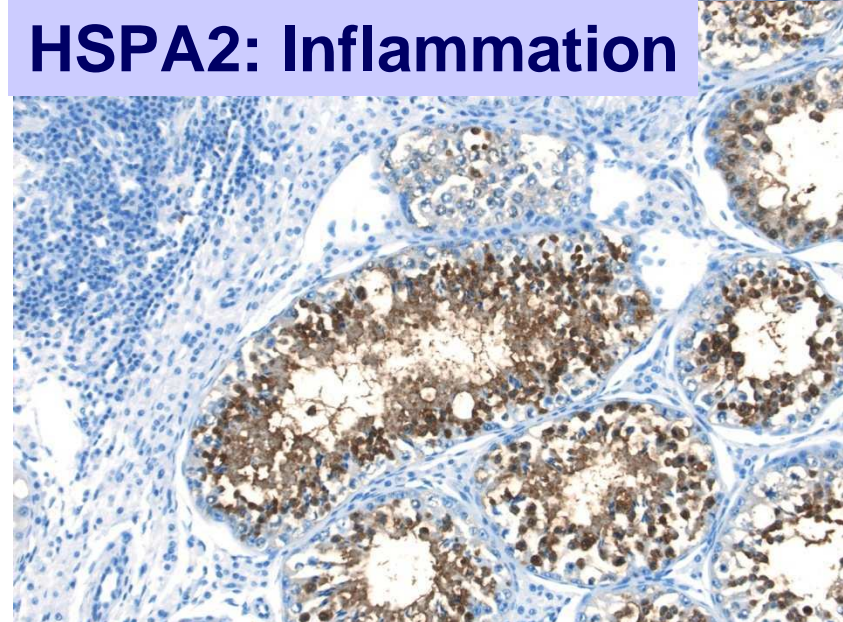
HSD3B1: Inflammation



HSPA2: Control

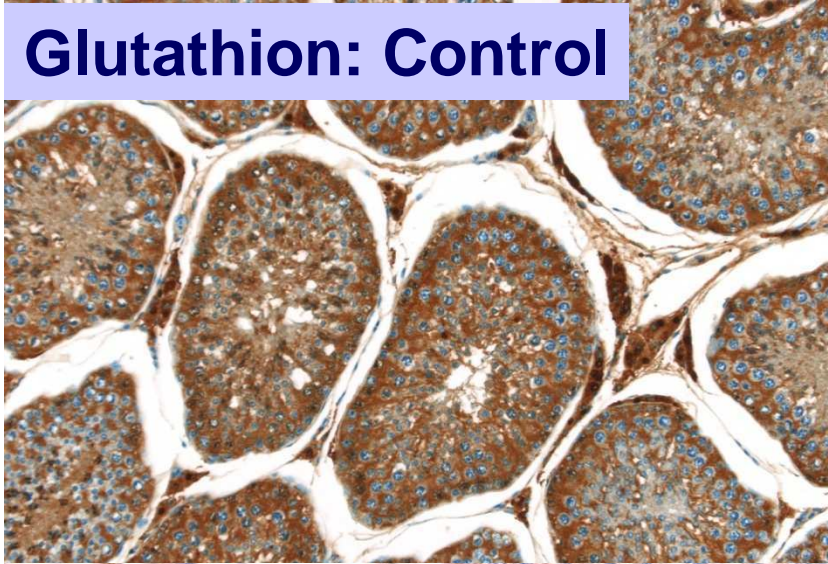


HSPA2: Inflammation

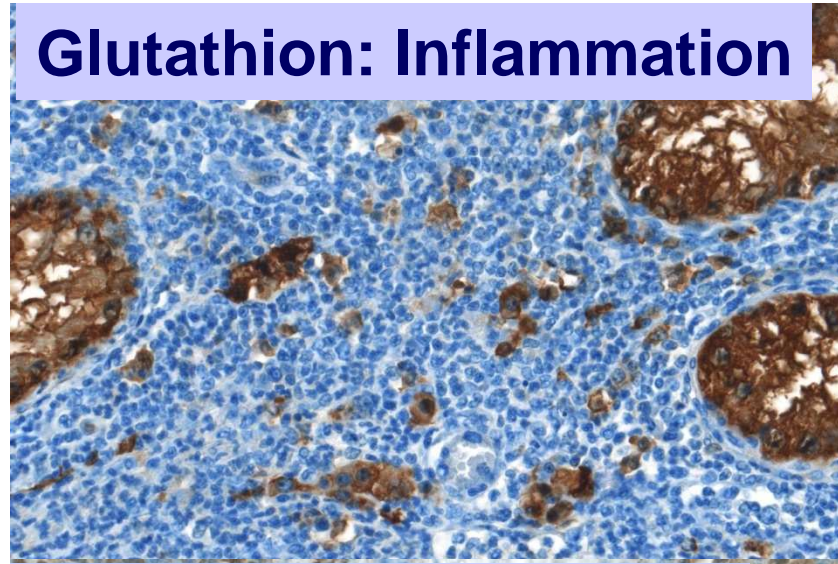


Spontaneous lesions: Beagle

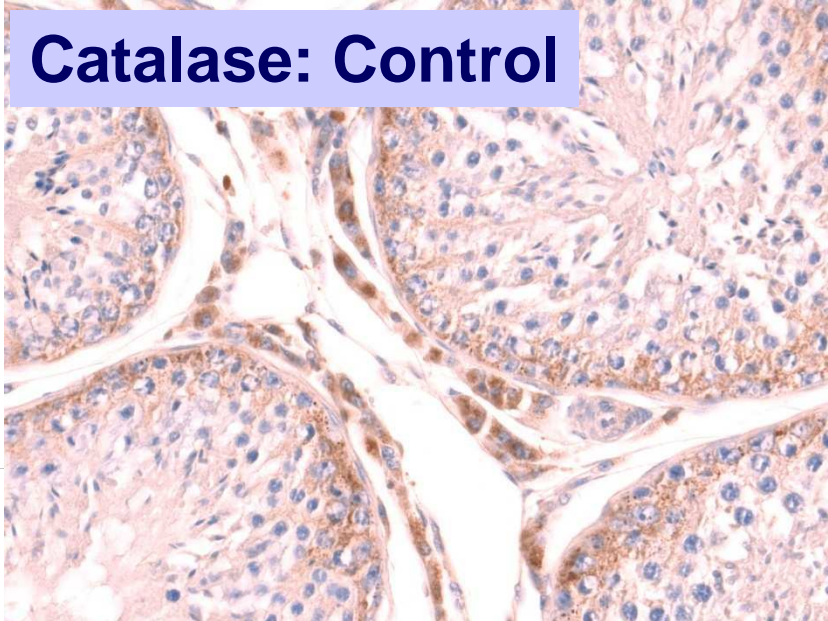
Glutathion: Control



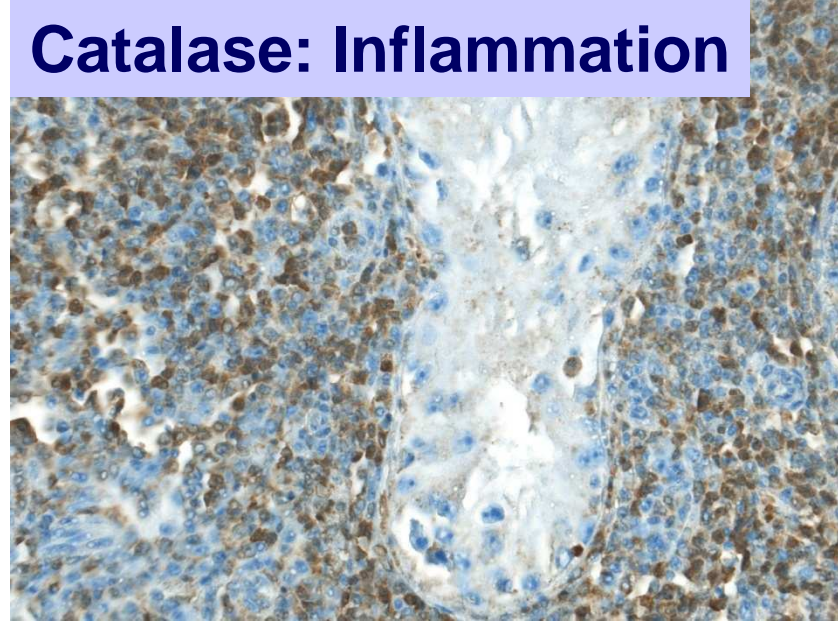
Glutathion: Inflammation



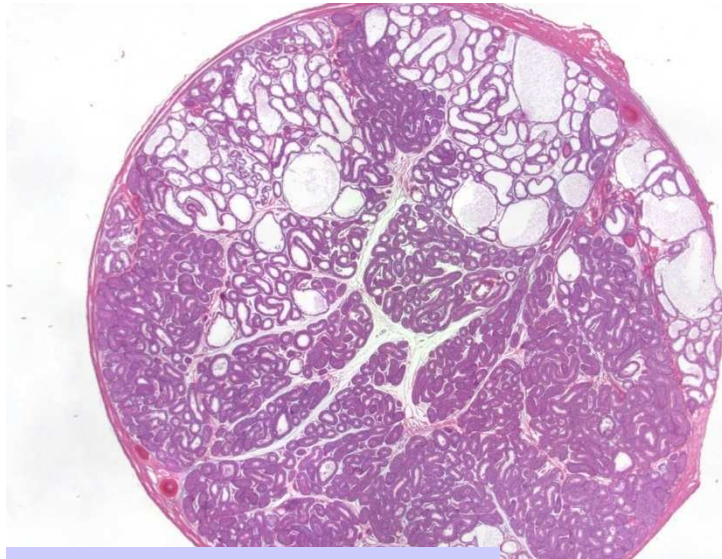
Catalase: Control



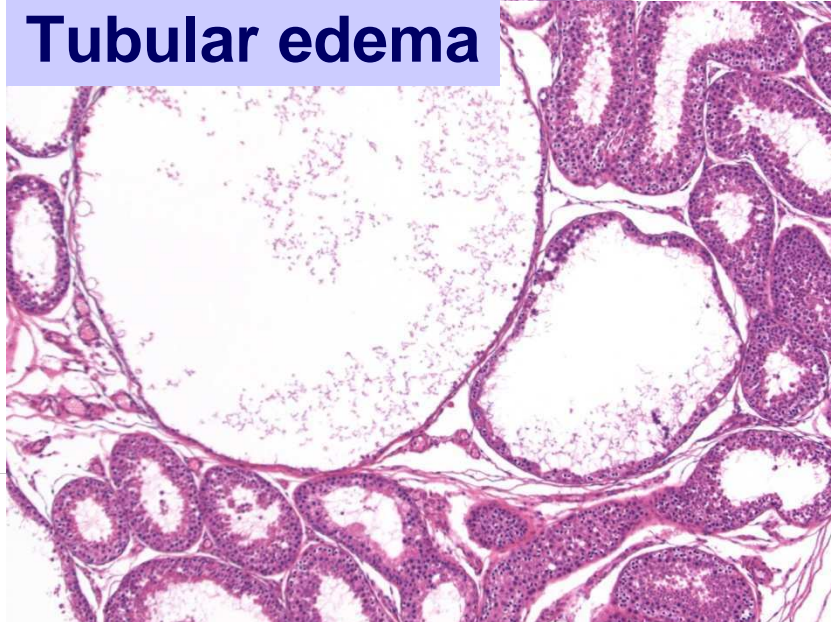
Catalase: Inflammation



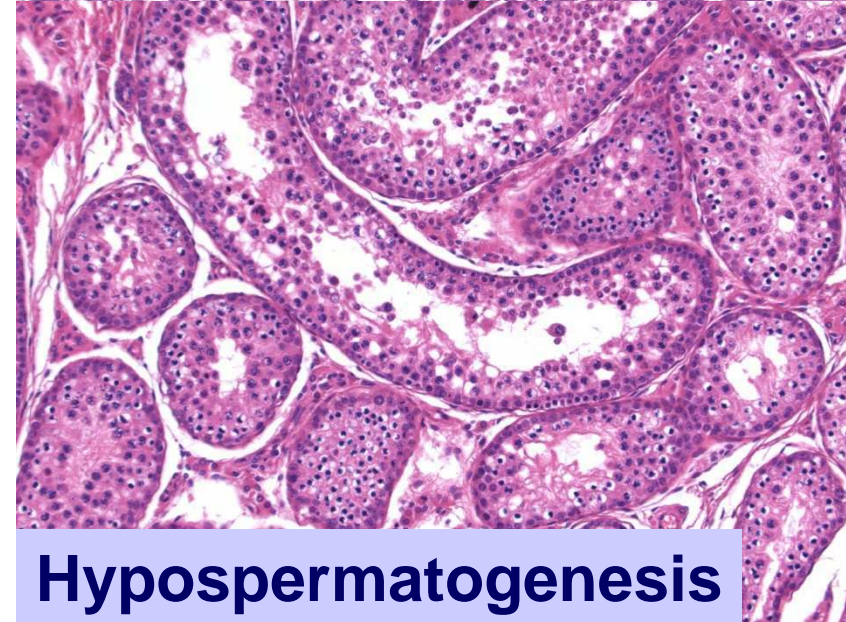
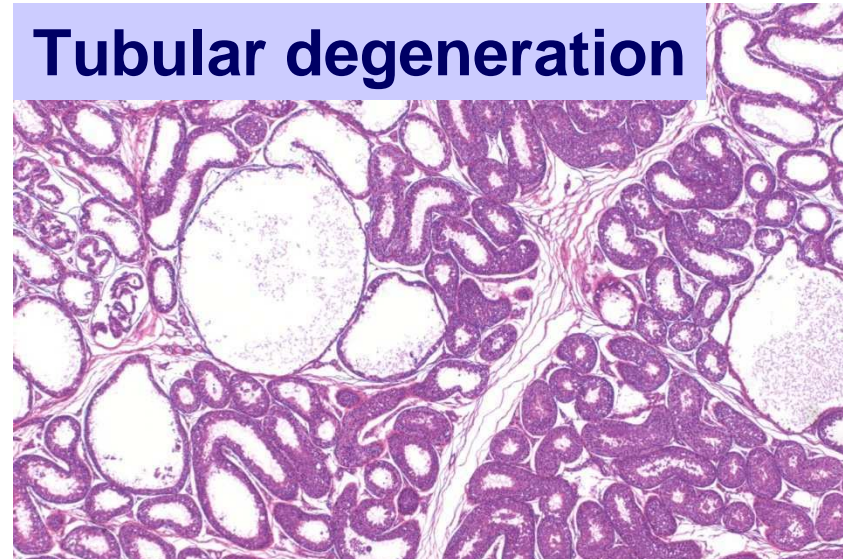
Normal situation: Rabbit



Tubular edema



Tubular degeneration

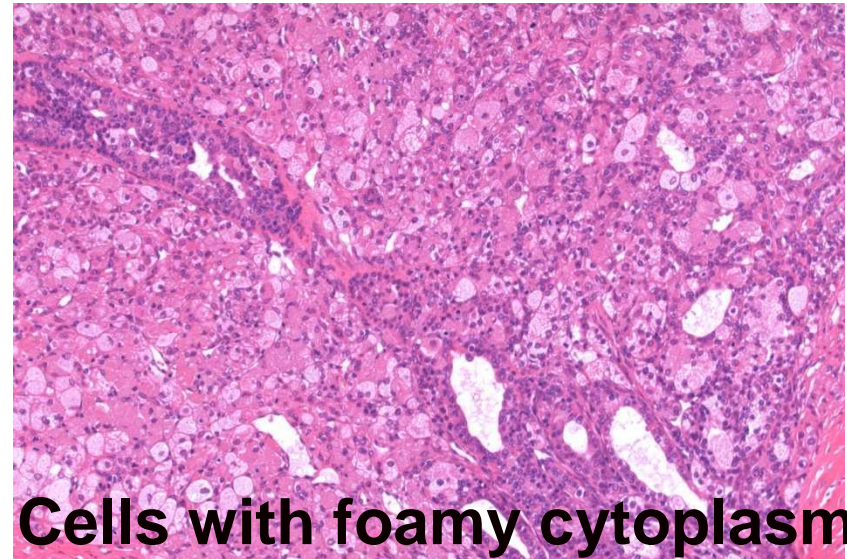


Hypospermatogenesis

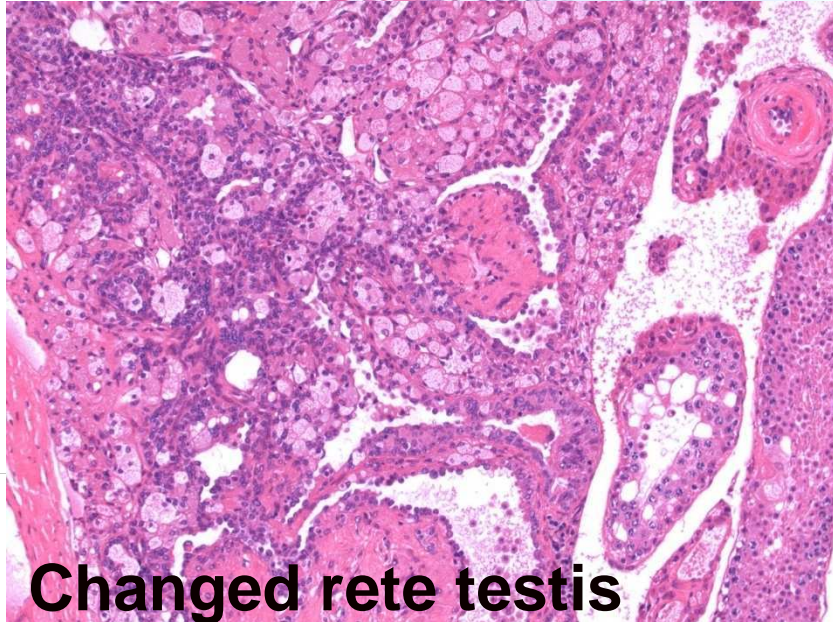
Unusual Lesions: CD-1 Mouse



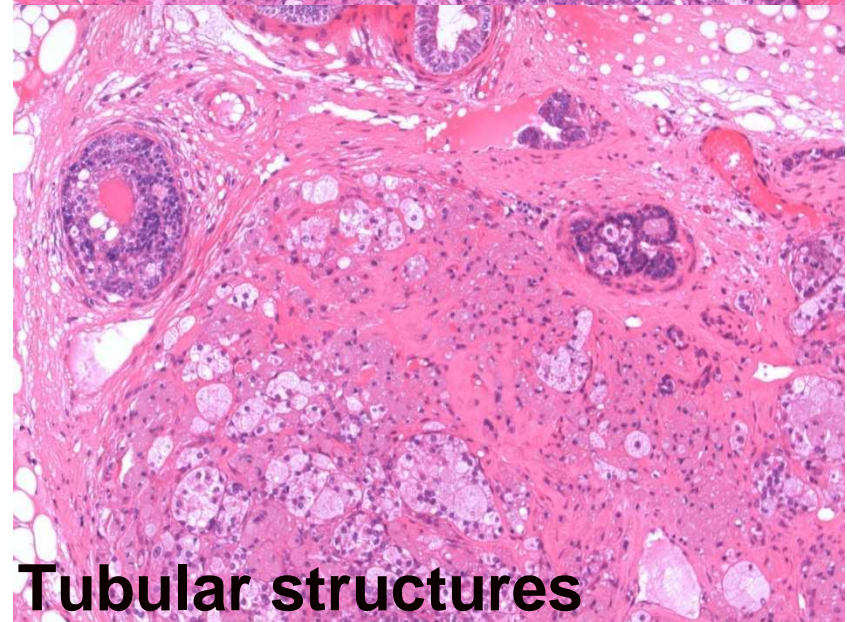
Protrusion of tissue



Cells with foamy cytoplasm



Changed rete testis



Tubular structures

Conclusions

Knowlege on:

- ✓ **Physiology (hibernating animals)**
- ✓ **Anatomy (rete testes, Leydig cells etc.)**
- ✓ **Consideration of study conditions**
- ✓ **Consideration of related pathology**
- ✓ **Species-related differences**
- ✓ **Proper fixation**
- ✓ **Immunohistochemistry as special tools**
- ✓ **Overview on background lesions**
- ✓ **Qualitative staging**