

### Male Reproductive Pathology: Scrotal contents

Epididymis



## Epididymis: Diseases

Epididymis is one duct and meters long.

#### Congenital disease

Spermatic granuloma of the epididymal head

Segmental aplasia (of mesonephric duct)

#### Epididymitis

inflammation of the epididymis [from infection]

spermatic granuloma alone is not called epididymitis



## Epididymis: Congenital disease

#### Spermatic Granuloma of Epididymal Head

- Blind ended efferent ductules
- Spermatocele
- Spermatic granuloma
- Obstructs epididymal duct
- Infertility

#### XY Testicular DSD





## Epididymis: Congenital disease

#### Segmental Aplasia of Mesonephric Duct

- XY Testicular DSD
- Don't use for breeding
  - Hereditary
  - No spermatozoal transport Infertility
  - Easily missed



## Epididymis: Epididymitis; dogs

- Bacterial infection
  - Ascending Gram negatives E. coli
  - Hematogenous Brucella canis
- Suppurative epididymitis with spermatic granulomas
- Clinical signs
  - 🛚 pain,
  - systemic illness,
  - self trauma





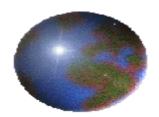
## Epididymis: Epididymitis; rams

#### Same as dogs except

- Brucella ovis
- **Gram negatives** 
  - Histophilus somni
  - Actinobacillus seminis







## Male Reproductive Pathology: Spermatic cord

Common diseases Uncommon diseases Pathogenesis

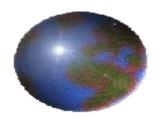


## Spermatic cord: Diseases

- Deferent duct
  - Vasectomy
- Pampiniform plexus
   Varicocele
- Inguinal canal
  - Hernia
    - horse
  - Lymph node lymphoma







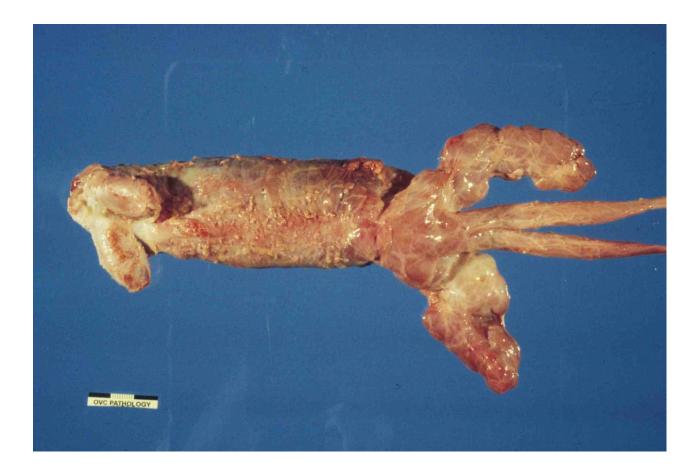
## Male Reproductive Pathology: Accessory genital glands

Common diseases Uncommon diseases Pathogenesis



## Accessory Genital Glands: Normal

- Ampullae
  Vesicular glands
  Prostate
- Bulbourethral glands





#### Accessory Genital Glands: Diseases

Bovine vesicular adenitis

- Canine prostate
  - Hyperplasia
  - Inflammation
  - Carcinoma (malignant)
  - Cysts and abscesses

# Accessory Genital Glands: Vesicular glands; vesicular adenitis

- Young bulls
   Ascending infection

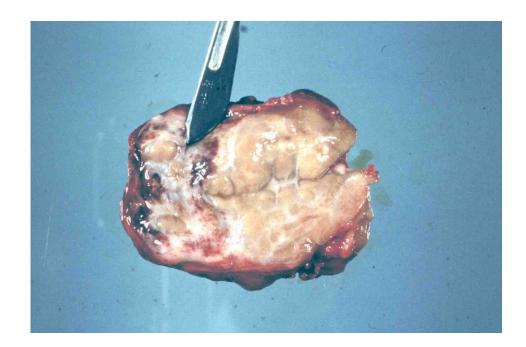
   Trueperella pyogenes

   Systemic infection
  - Mycoplasma
  - 🛚 Brucella abortus
- Acute fibrinopurulent or chronic interstitial inflammation

#### Infertility



#### Accessory Genital Glands: Vesicular glands; acute vesicular adenitis



Suppurative vesicular adenitis

## Accessory Genital Glands: Bovine vesicular glands; chronic vesicular adenitis

Fibrosis and sequestrum



## Accessory Genital Glands: Canine Prostate; Prostatic hyperplasia

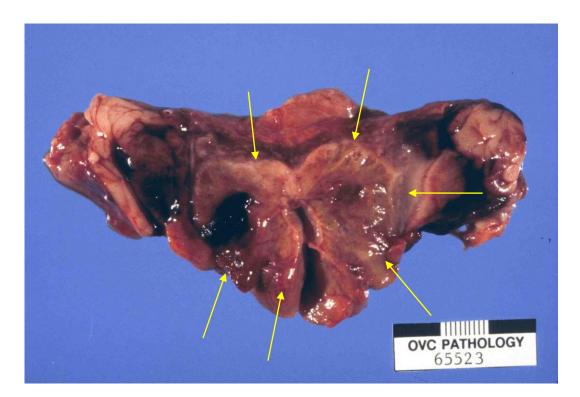
- Prostate is testosterone dependent
- Eccentric enlargement



12 months old (right) and 5 years old (left)

### Accessory Genital Glands: Canine Prostate; Prostatitis

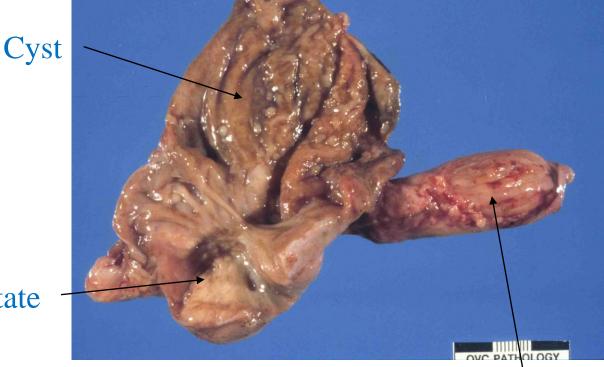
#### *E. coli* is the most common



Arrows outline capsule of prostate

Accessory Genital Glands: Prostate; paraprostatic cysts and abscess

 Most arise from cystic hyperplasia



Prostate





Accessory Genital Glands: Prostate; carcinoma of the prostate

Older dogs

Local infiltration and metastasis.

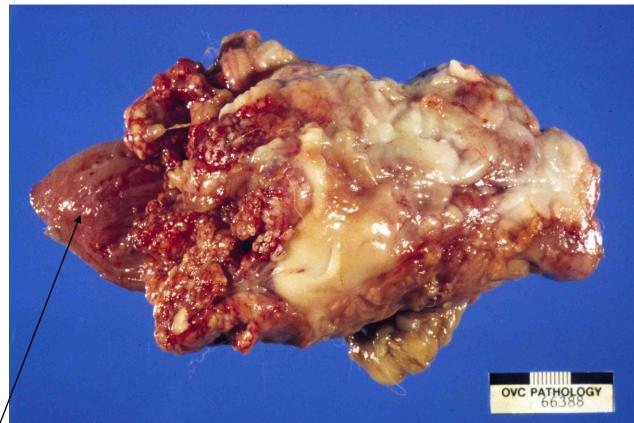
Types (prognostic difference not established)
 Urothelial carcinoma
 Adenocarcinoma

Carcinoma with mixed urothelial and glandular phenotypes

Palmieri C, Foster RA, Grieco V, Fonseca-Alves CE, Wood GA, Culp WTN, Murua Escobar H, De Marzo AM, Laufer-Amorim R. Histopathological Terminology Standards for the Reporting of Prostatic Epithelial Lesions in Dogs. J Comp Pathol 2019; 171: 30-37

Accessory Genital Glands: Prostate; carcinoma of the prostate

#### Prostate carcinoma.



Bladder

This one was an adenocarcinoma and filled the pelvis.



#### Accessory Genital Glands: Prostate; carcinoma of the prostate

#### Prostate carcinoma in a neutered dog.



This urothelial carcinoma is minimally invasive and caused obstruction.