

Respiratory Diseases of the Dog and Cat

Respiratory Diseases

- Noninfectious Disease
 - Congenital
 - Degenerative
 - Immune-mediated
 - Toxic
- Infectious Diseases
 - Viral
 - Bacterial
 - Mycotic
 - Parasitic
- Proliferative/neoplastic

Nasal Passages

Non-Infectious Inflammatory Diseases

- Trauma/Foreign body – grass seed, twig, etc
- Immune- mediated rhinitis
 - Acute rhinitis and conjunctivitis – edema, eosinophils, neutrophils, and macrophages
 - Chronic
 - Lymphoplasmacytic infiltrates
 - Resolves with steroid treatment
- Toxic
 - Smoke inhalation, other gases

Epistaxis Differentials

- Trauma
- Foreign body
- Invasive intranasal lesion
 - *Aspergillus* sp
 - Neoplasia
- Bleeding disorder
 - Genetic
 - Warfarin toxicity
 - Rickettsial infection

Normal Flora of Upper Respiratory Tract

- *Pateurella multocida*
- *Bordetella bronchiseptica*
- Staph, strep, pseudomonads, coliforms
- Allows opportunistic infection following viral disease, immune suppression, toxic exposure, etc
- Pathogen infection may be reactivated with stress and/or pathogens shed
- Stress can activate/reactivate latent herpes viral infection

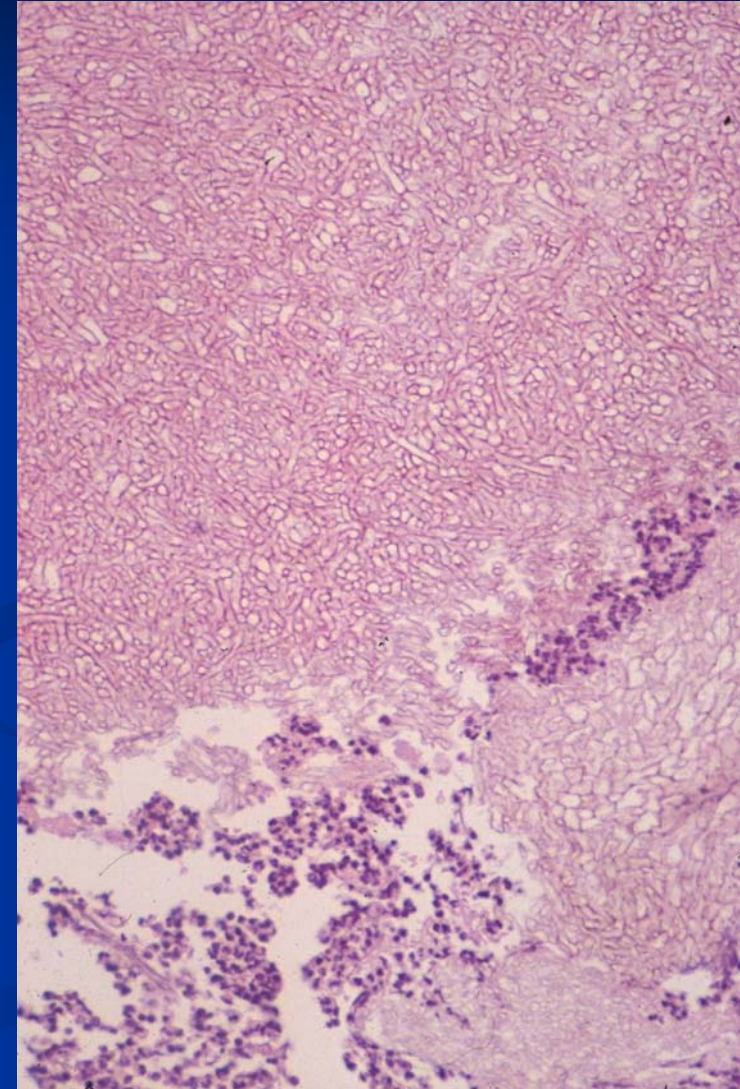
Infectious Rhinitis and Sinusitis

- Viral – none specifically affecting this area
- Bacterial
 - Primary infection rare, but may be secondary
 - Secondary to tooth root abscess
- Mycotic
- Parasitic

Mycotic Rhinitis and Sinusitis

- Mycotic Agents
 - *Aspergillus* sp (often dogs – nasal passages)
 - *Penicillium* sp (as *Aspergillus* sp)
 - *Cryptococcus neoformans* (often cats - sinuses), *C. gatti*
- *Rhinosporidium seeberi* (may cause nasal polyps)
- Clinical signs
 - Mucopurulent discharge
- Pathology
 - Granulomatous inflammation
 - Can be invasive, into bone

Nasal Aspergillosis - Dog



Cryptococcus sp.

- Species: primarily cat, also dog (also marsupials)
- Pathology
 - Granulomatous nodules
 - Mucopurulent inflammation
- Affects nasal mucosa, sinuses, lung
 - May also affect skin, brain
- Subcutaneous nodules on nose of cats

Cryptococcosis - Cat

