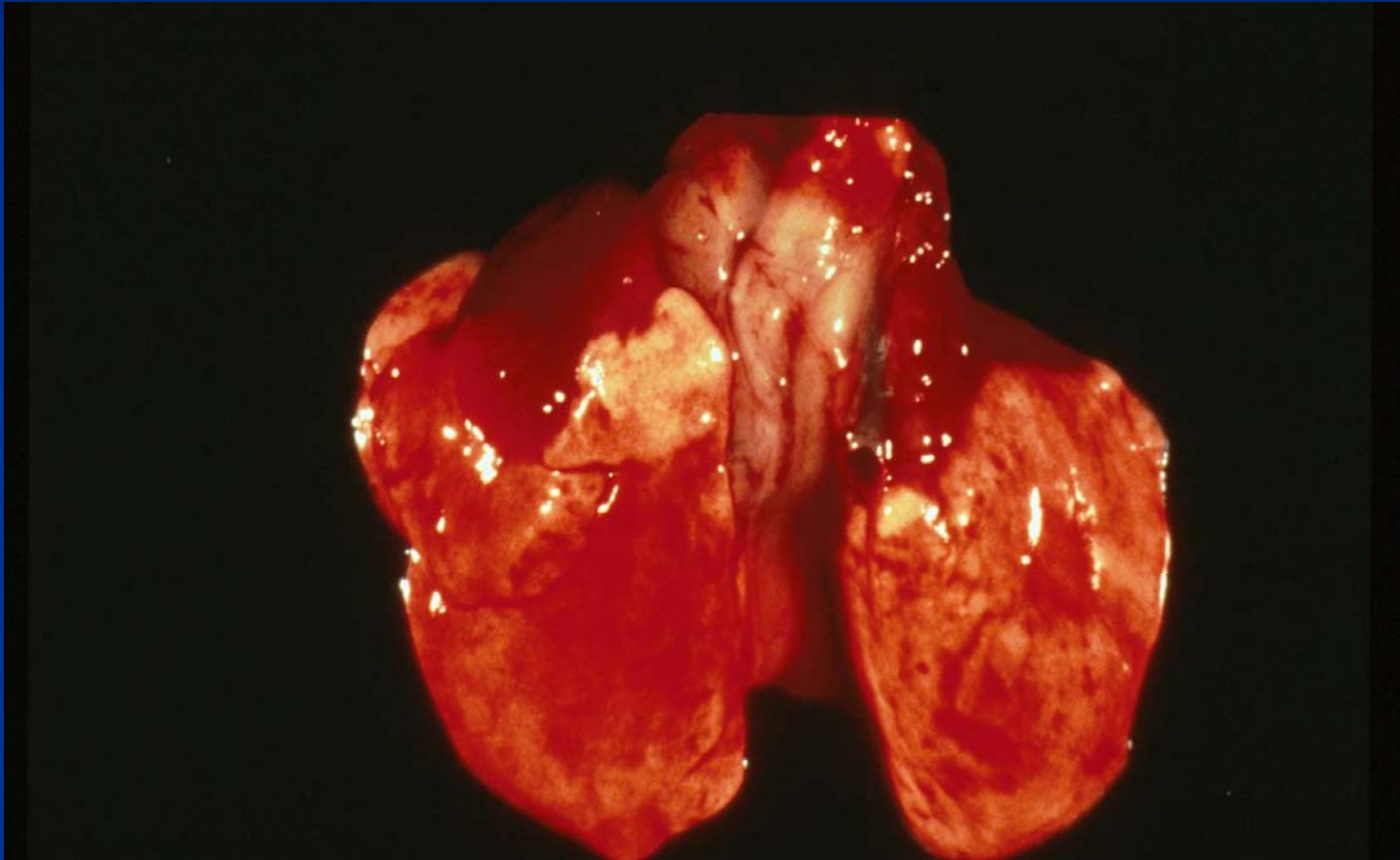


Murine respiratory mycoplasmosis (*Mycoplasma pulmonis*)

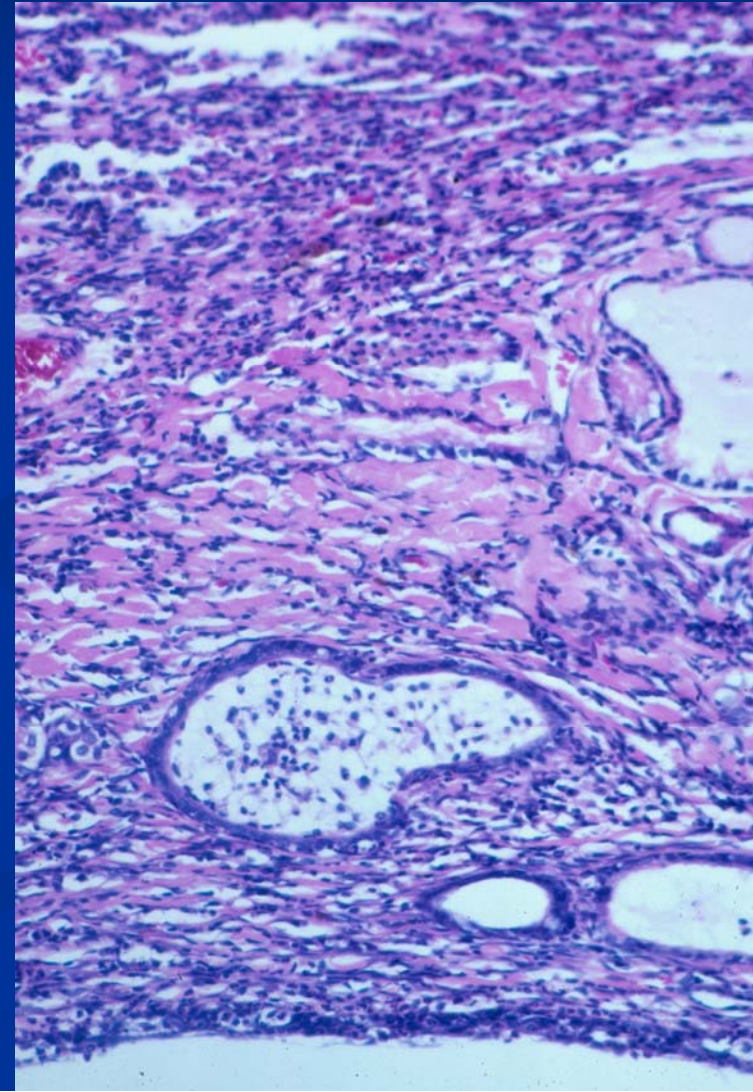
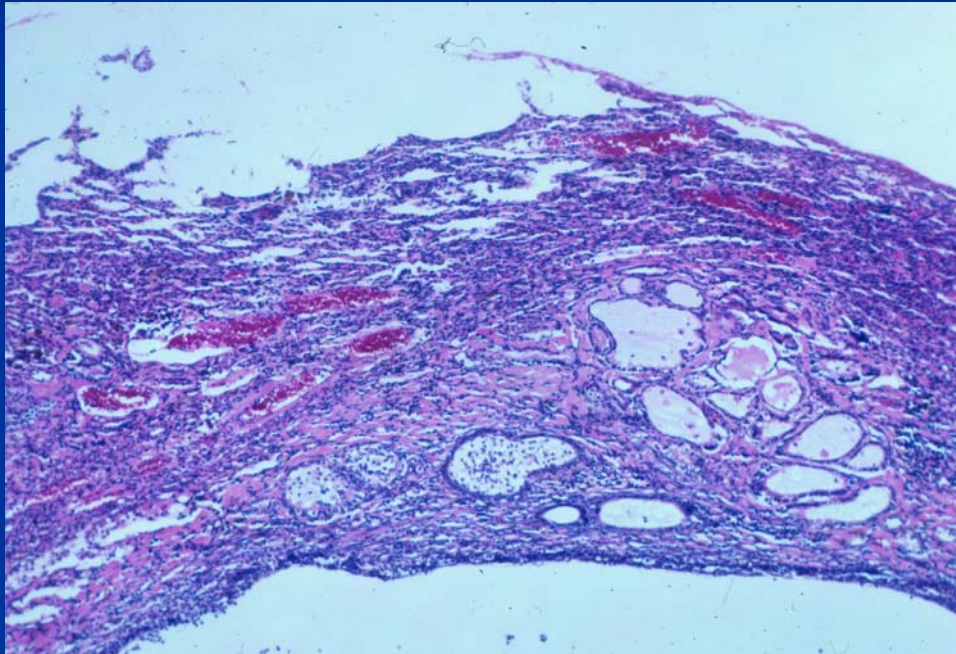
- Synonym: chronic respiratory disease (CRD)
- Was most significant spontaneous lesion in most rat colonies.
- Principally an upper respiratory tract pathogen.
- Severe lung lesions common only in advanced cases
- Earliest lesions in nares, larynx, and middle ear.
- Lung involvement
 - Lymphoid hyperplasia and infiltration lymphoid tissue.
 - Bronchiectasis in advanced lesions

Mycoplasmosis



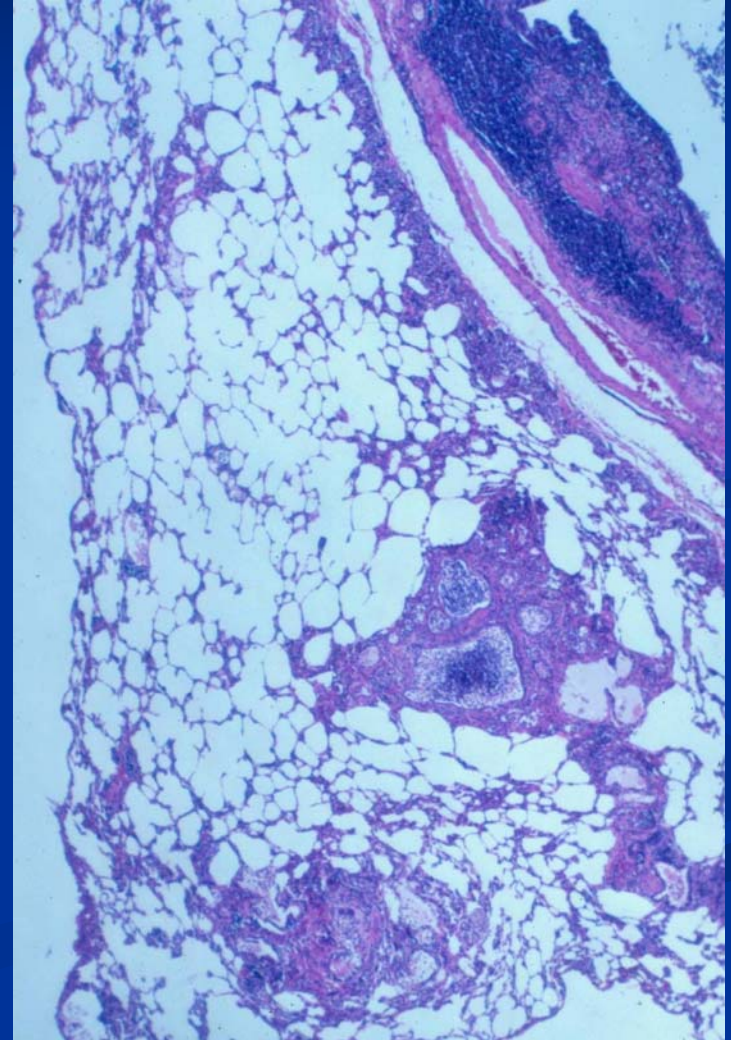
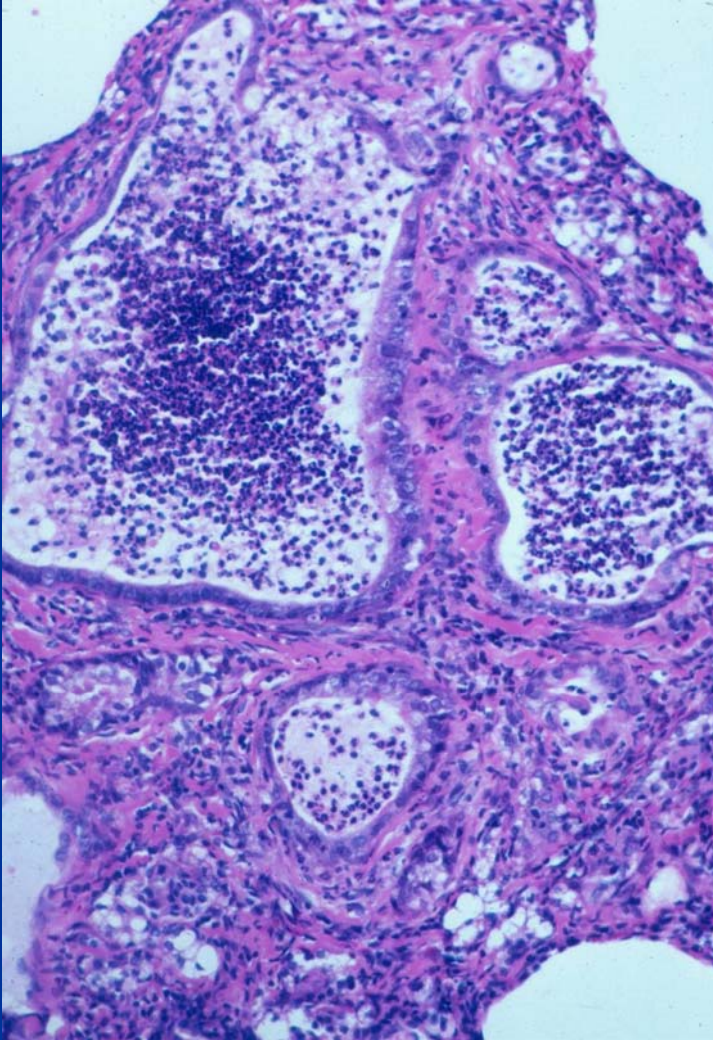
Chronic Respiratory Disease

Fibrosis, Chronic Inflammation

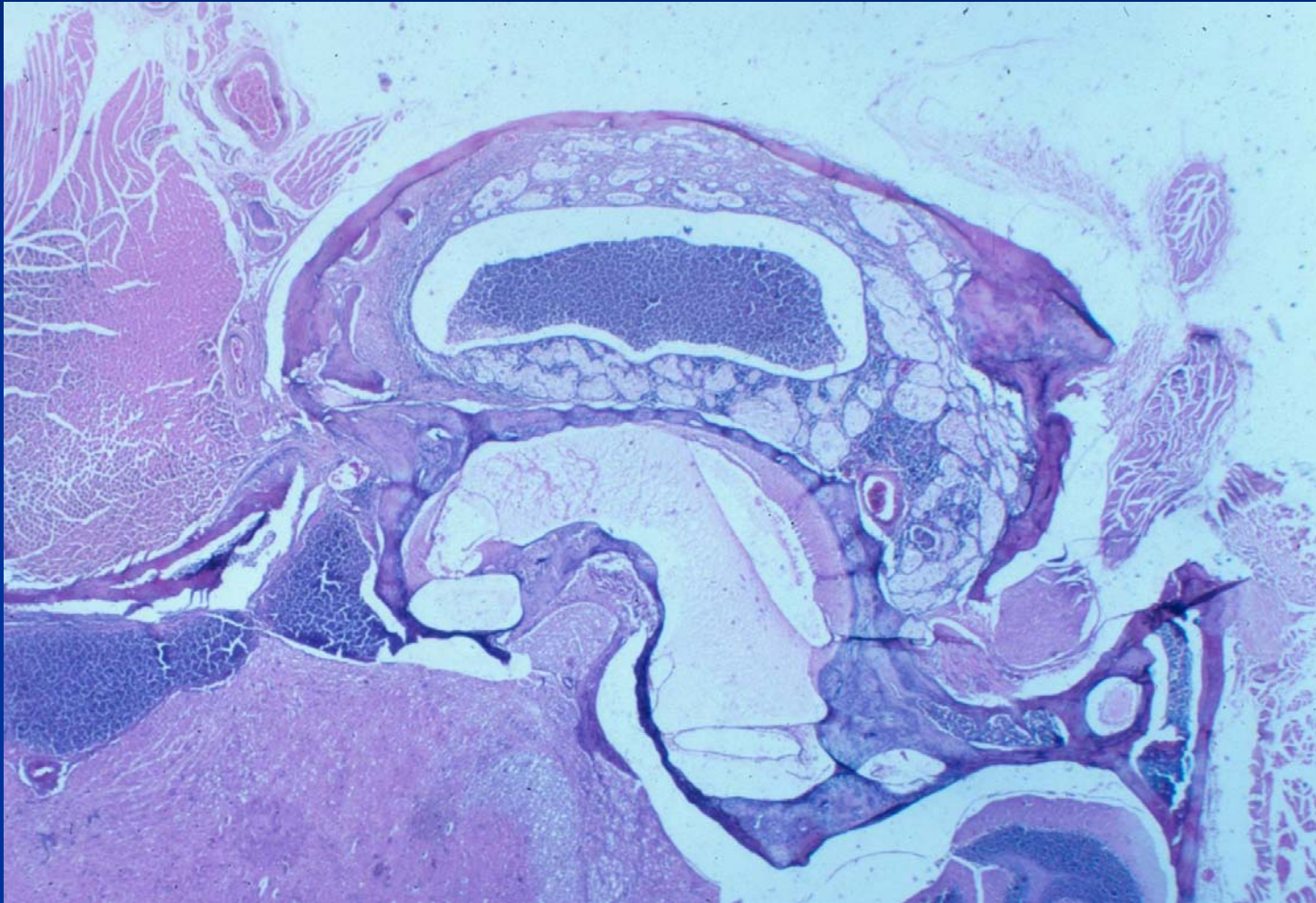


Chronic Respiratory Disease

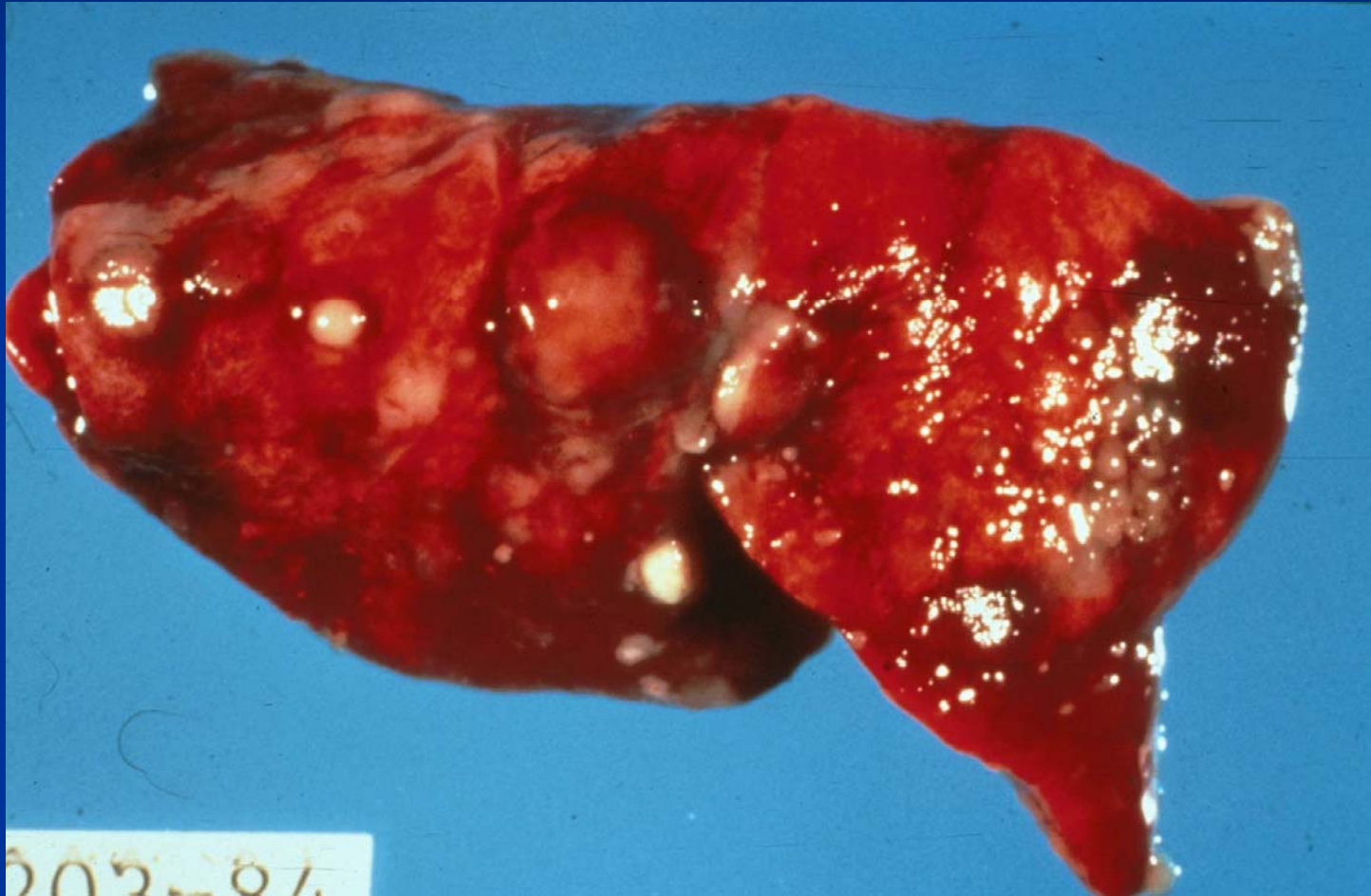
Fibrosis, Lymphoid Infiltrates



Mycoplasma Otitis



Corynebacterium kutscheri—Rat
Lung abscesses and pneumonia



Streptococcus pneumoniae

(Diplococcus, Pneumococcus)

- *Prevalence*: low, can see outbreaks of disease
- *Diagnosis*: culture lesions, Gram stain exudate
- *Disease*: subclinical carriers common (80 %).
- *Lesions*: rhinitis, fibrinopurulent pleuritis, pericarditis, peritonitis, periorchitis, meningitis, otitis and pneumonia.
- *Transmission*: respiratory, contact
- *Duration*: chronic carriers/acute disease
- *Comment*: pathogenicity varies with serotype.

Other Infectious Agents

- Fungal – similar to mice
 - *Pneumocystis carinii*
 - *Pneumocystis wakefieldii*
- Parasitic
 - *Trichosomoides crassicauda* (bladder thread worm)

Trichosomoides crassicauda (bladder thread worm)

- *Prevalence*: infrequent
- *Diagnosis*: bipolar ova in urine, worms in bladder, ureters and renal pelves
- *Disease*: eggs hatch, penetrate stomach wall, migrate through lungs and other viscera and seek urinary tract epithelium.
- *Pathology*: migrating larvae incite eosinophilia and granulomata, especially in lungs.
- *Transmission*: urine.

Respiratory Diseases of Rabbits

- Order Lagomorpha
- There are over 100 different breeds - descendants of European wild rabbit, *Oryctolagus cuniculus*
- Majority used in biomedical research are New Zealand white
- Heterophils rather than neutrophils
- Anatomic feature - thick medial walls of pulmonary vessels