

Multisystemic Eosinophilic Epitheliotropic Disease (MEED)

- Chronic history of respiratory distress with weight loss
- Primarily in young horses, 3 -17 yr old
- Eosinophilic and lymphoplasmacytic infiltrates and eosinophilic granulomas
- In multiple organs including lung, skin, pancreas, salivary gland, GI and biliary and bronchial epithelium
- Similar syndrome in humans, dogs, cats and ferrets
- Etiology not known

Immune-Mediated Diseases - Anaphylaxis

- Type I hypersensitivity
- Etiology
 - Iatrogenic: antibiotic injection, vaccination
- Pathology
 - Pulmonary edema with eosinophils
 - Airway constriction

Equine Allergic Pneumonitis/Chronic Obstructive Pulmonary Disease (COPD)

- Hyperreactive airways and genetics have role
- Major disease of stabled horses (heaves)
- Type I and III hypersensitivity to allergens (fungal from hay, choock manure, etc)
- Cough, dyspnea, wheezing (expiratory)
- Pathogenesis: bronchitis/bronchiolitis leads to alveolar emphysema

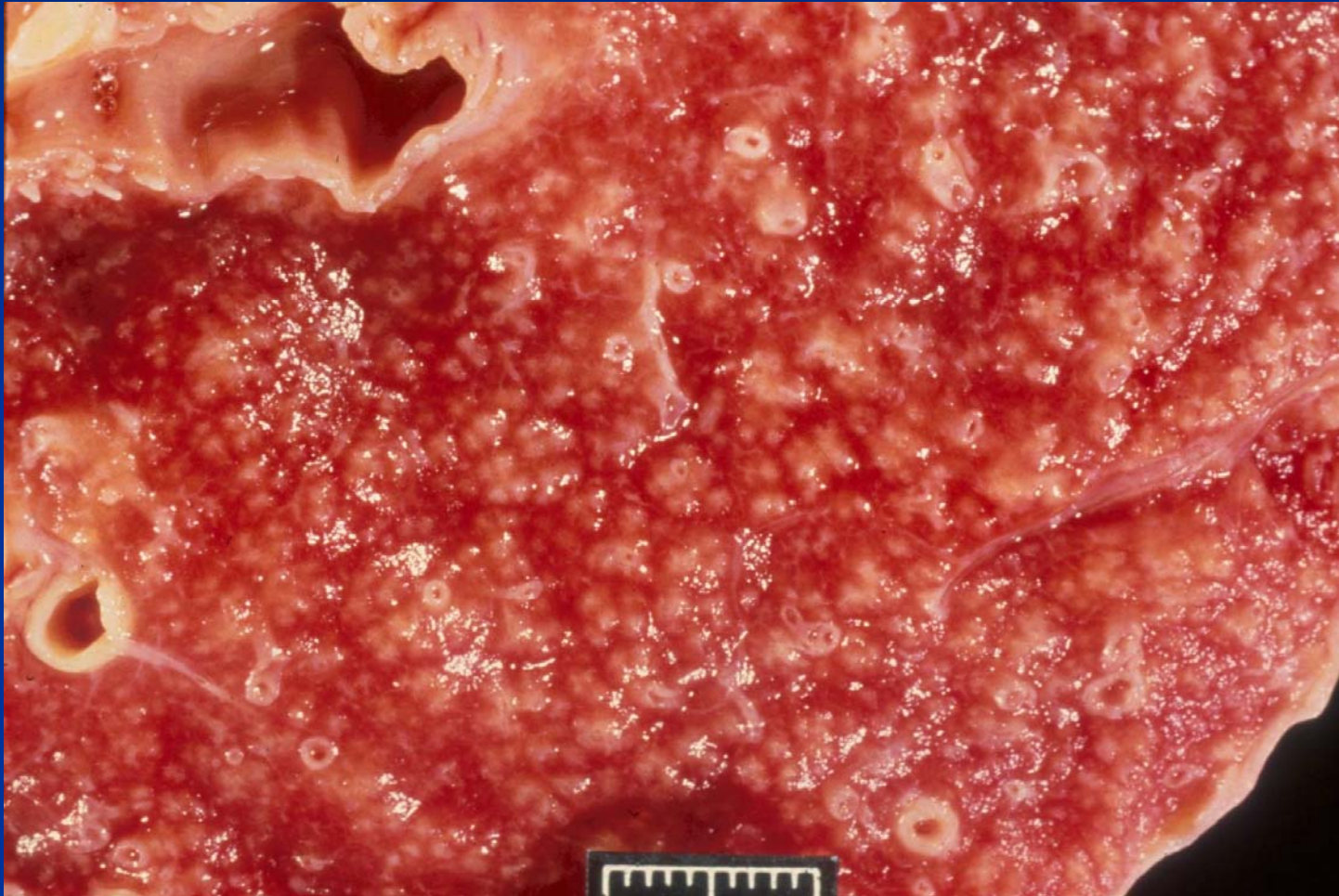
COPD – Emphysema - Horse



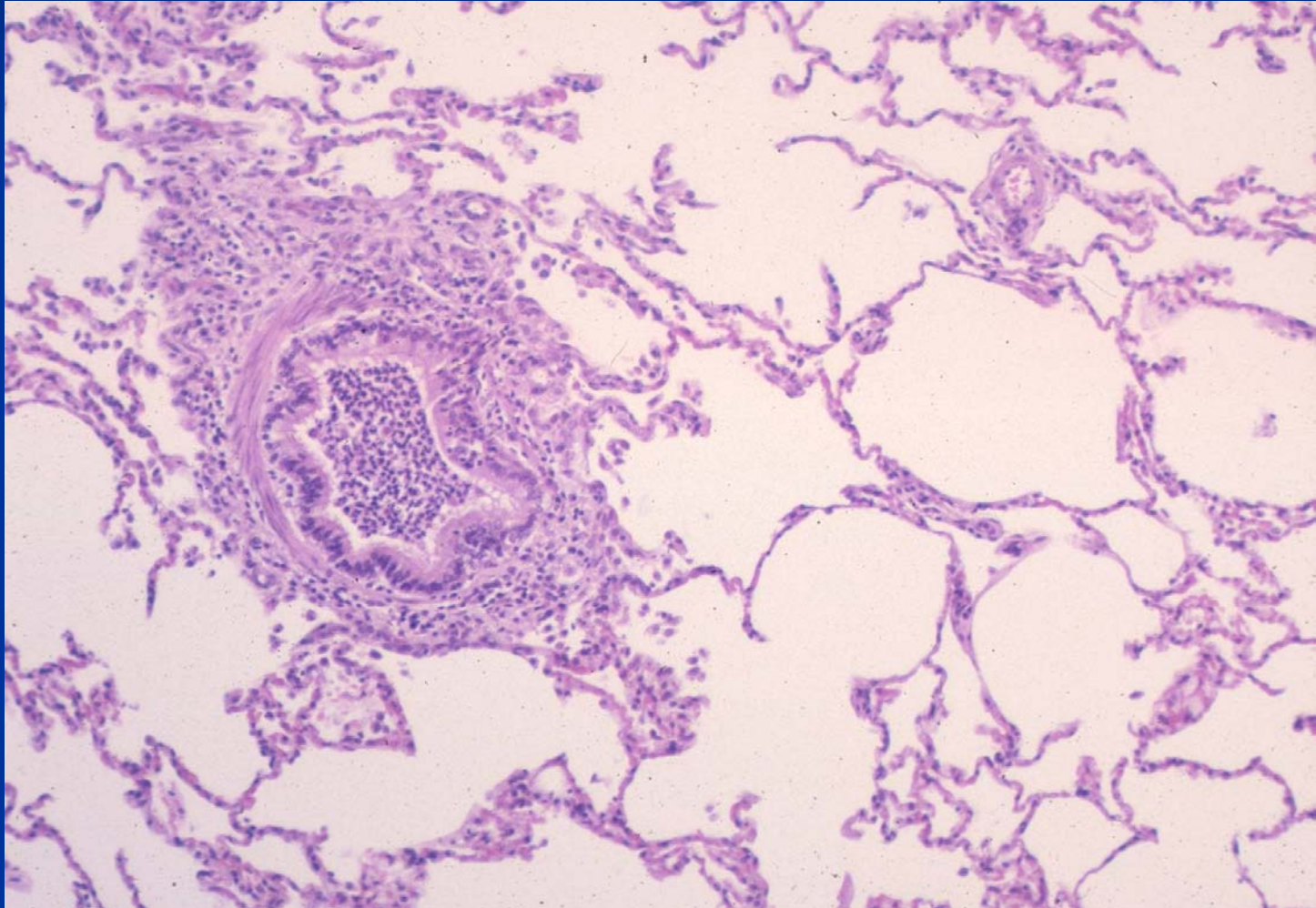
COPD – Emphysema - Horse



Muroid Bronchiolitis in COPD



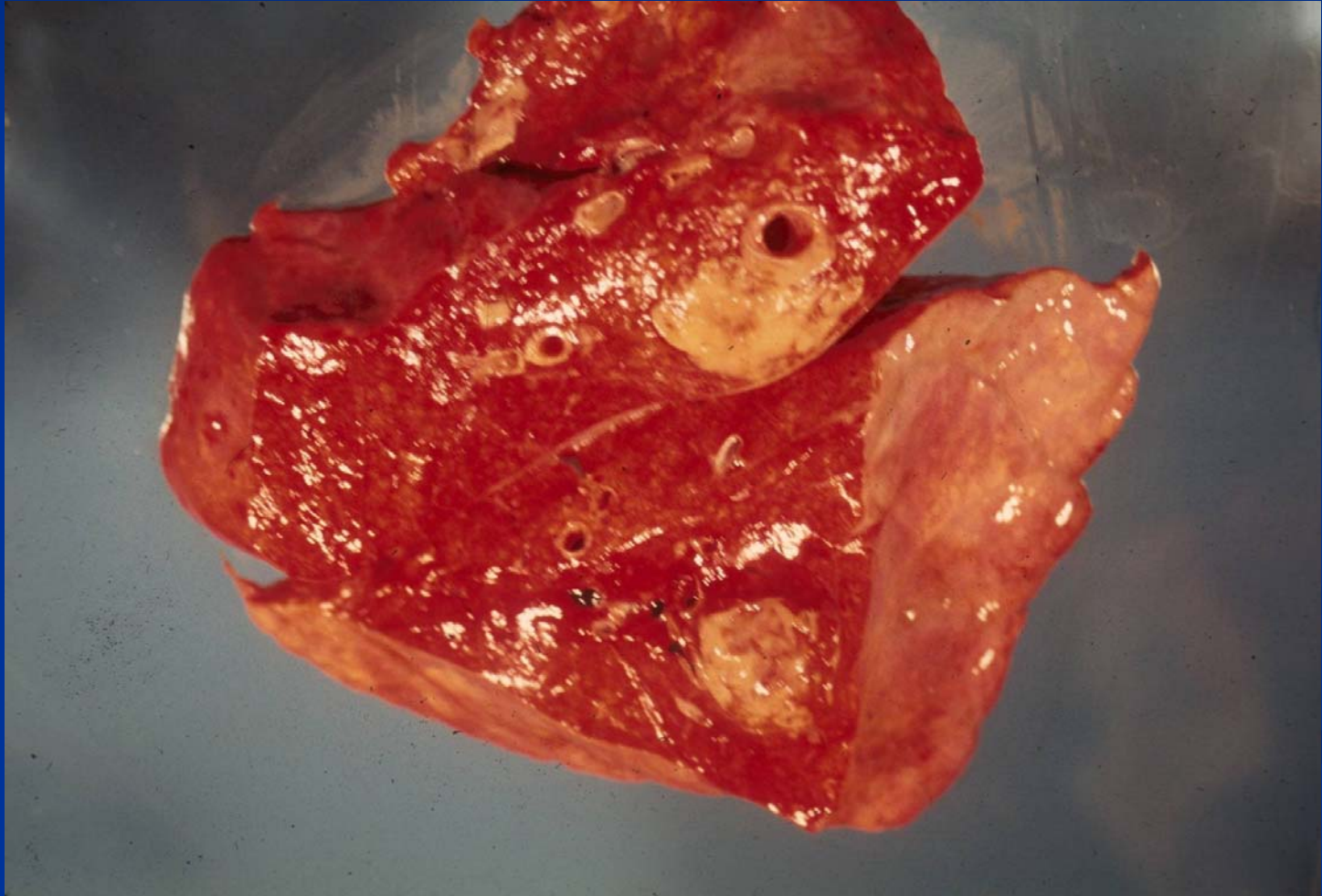
Mucoid Bronchiolitis and Emphysema in COPD



Neoplasia

- Primary – rare
- Secondary – metastatic includes
 - Melanosarcoma
 - Lymphosarcoma

Lymphosarcoma



Pleuritis/Pyothorax

- Primary
 - Bacterial e.g. *Nocardia asteroides* and *brasiliensis* – sulfur granules
- Secondary
 - Extension of pneumonia
 - Ruptured lung abscess – quite common