

Porcine Atrophic Rhinitis

■ Clinical signs

- Not proportional to pathology
- Sneezing, coughing, nasal discharge
- Obstruction of nasolacrimal duct with crusting
- Poor weight gain

■ Diagnosis

- Clinically - culture
- At necropsy - transverse section of snout between premolars 1 and 2

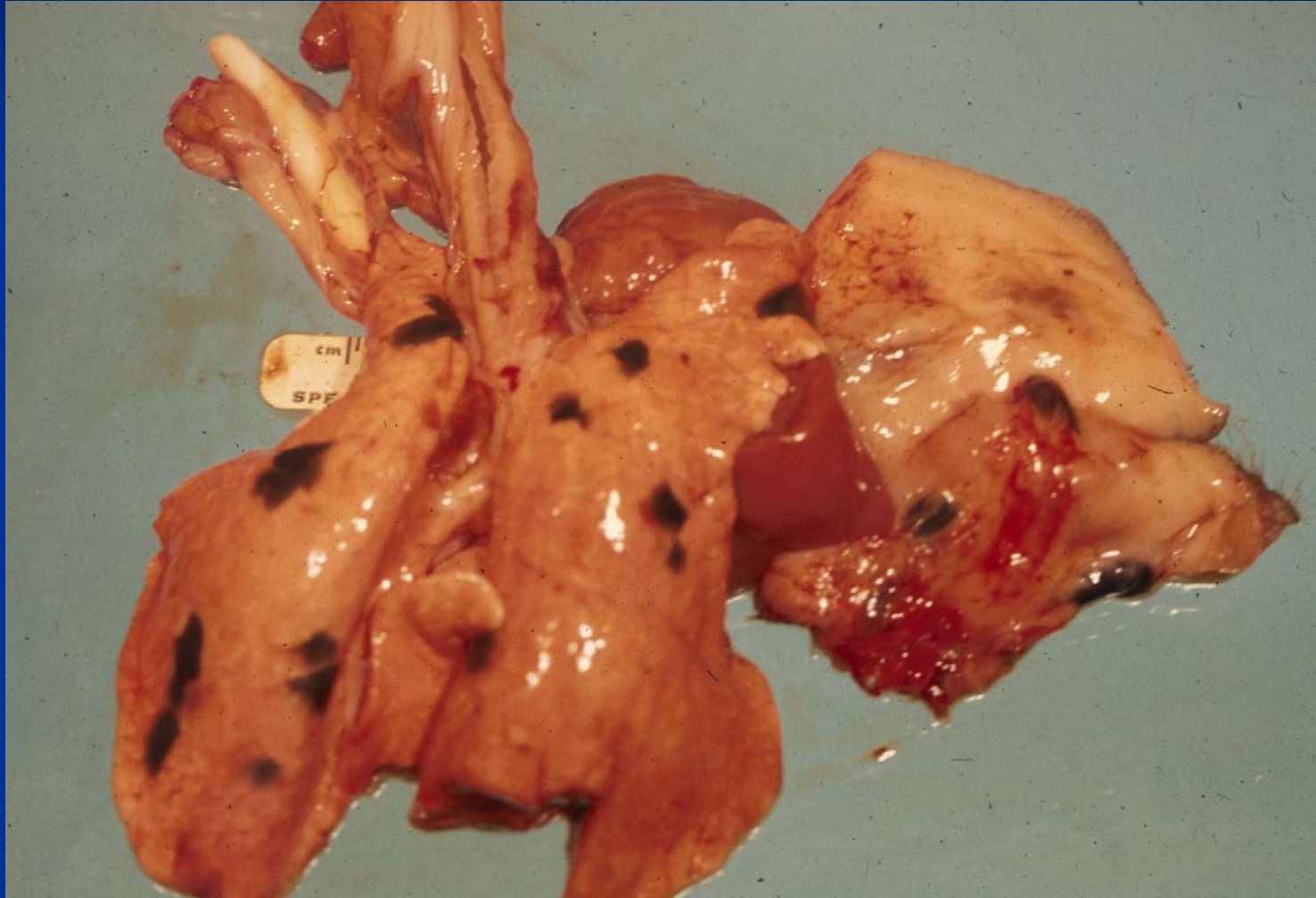
Lower Respiratory Tract

- Non Infectious Diseases
 - Developmental abnormalities
 - Circulatory disease
 - Aspiration pneumonia
- Infectious Diseases
 - Viral
 - Bacterial

Developmental Lung Anomalies

- Accessory lungs
- Lung hypoplasia (primary or secondary)
- Surfactant deficiency
- Melanosis

Developmental Lung Anomalies



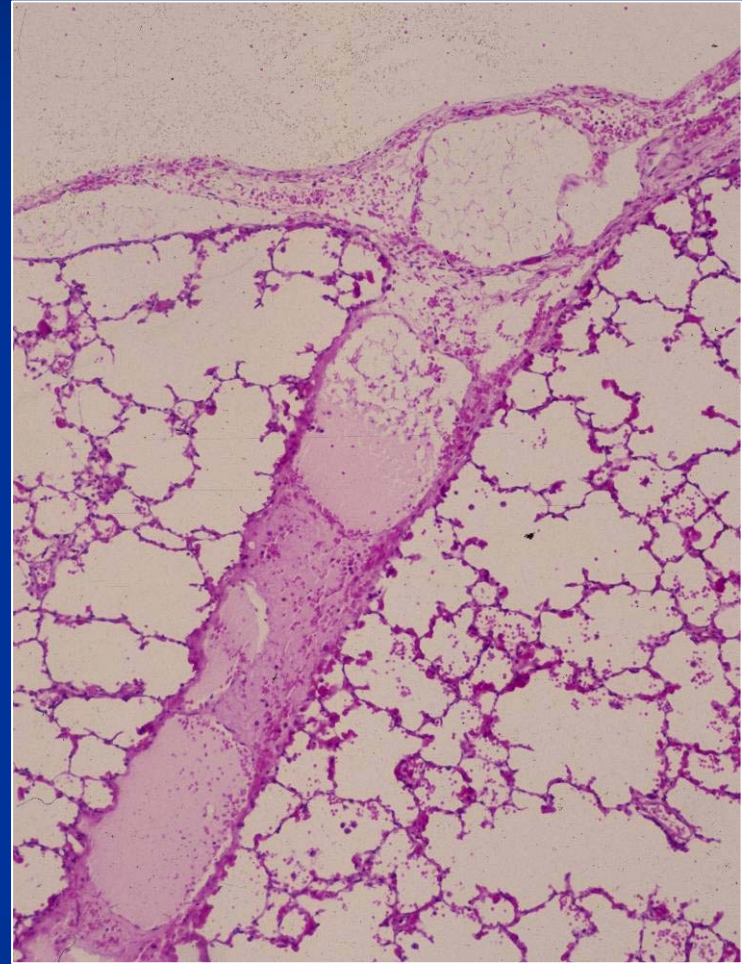
Pulmonary Edema

- Edema with petechial hemorrhages
 - Septicemias
 - Viral diseases
 - African swine fever (exotic disease)
 - Chronic – pleuritis and lobar pneumonia
 - Classical swine fever (hog cholera) – exotic disease

Pulmonary Edema

- Cardiogenic edema
 - Common cause of pulmonary edema in pigs
 - Vitamin E/selenium def– “mulberry heart disease”
 - Fumonisin mycotoxins
 - Other toxins
- Damage to epithelium, endothelium
 - Toxicant induced edema
 - Inhalation – smoke, oxygen, ammonia
 - Blood borne – endotoxin

Pulmonary Edema – Pig - Fumonisin



Aspiration Pneumonia

- Etiology/predisposing factors
 - Unpelleted feeds
 - Inhalation of vegetable material
 - Foreign body granulomatous pneumonia
 - Improper tubing (oil, medication)
 - Prenatal stress – amniotic fluid and meconium

Infectious Disease

- Pneumonias are of great economic importance in swine
- Important factors include
 - Host e.g. age, genetics, immunity
 - Infectious agent
 - Environment e.g. humidity, temperature, ammonia concentration
 - Management practices e.g. crowding, mixing, nutrition, stress

University of Illinois Veterinary Diagnostic Laboratory - Porcine Respiratory Disease Workup

- Total charge - \$95
- 1-4 animals
- Necropsy and histopathology
- Bacteriologic culture – lung, LN, etc
 - *Actinobacillus* and *Haemophilus* spp
 - PCR for Salmonella, PRRS as needed
- Virus isolation – lung, LN, trachea
 - PRRS, influenza (SIV), pseudorabies and others as needed