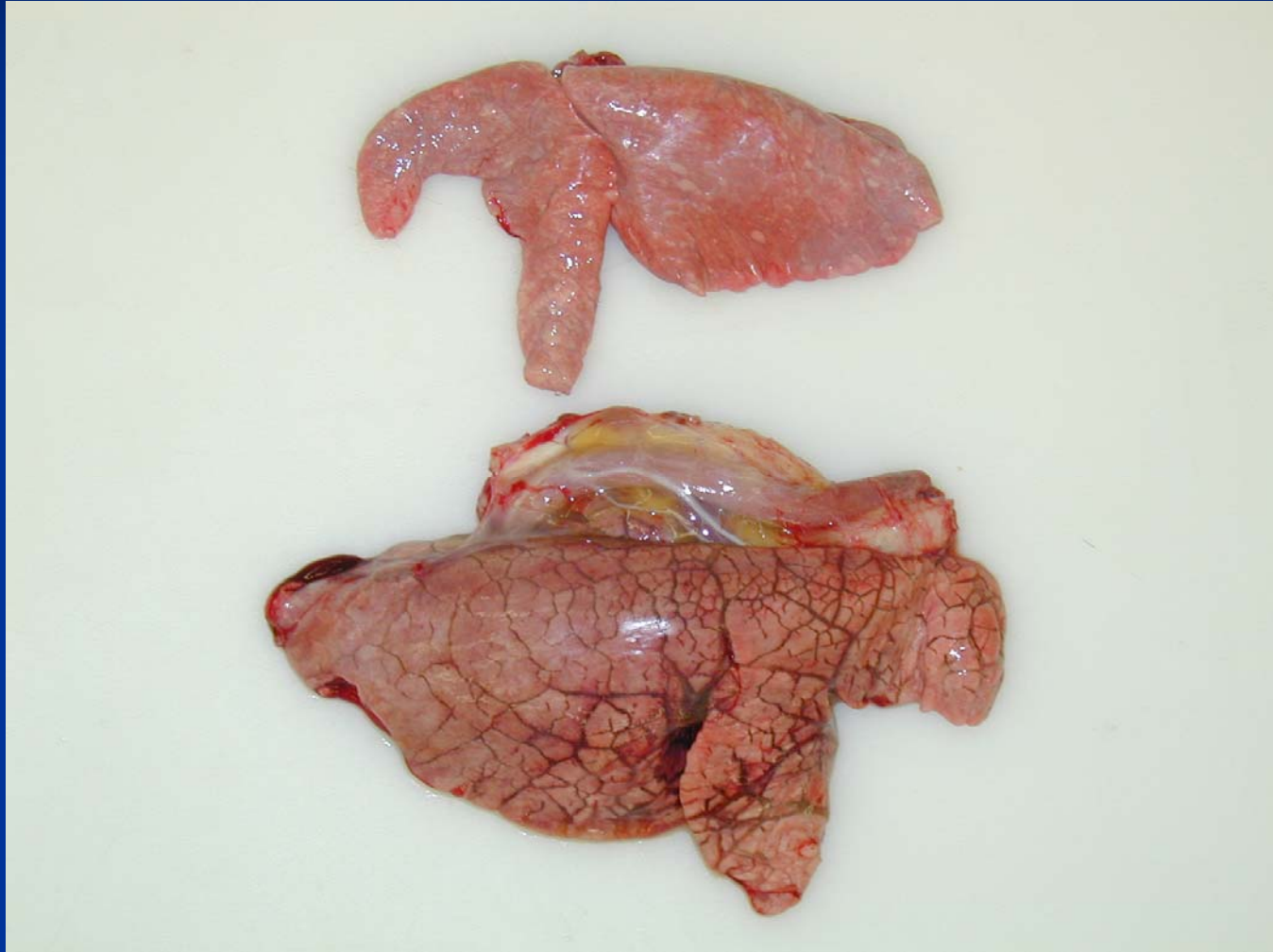
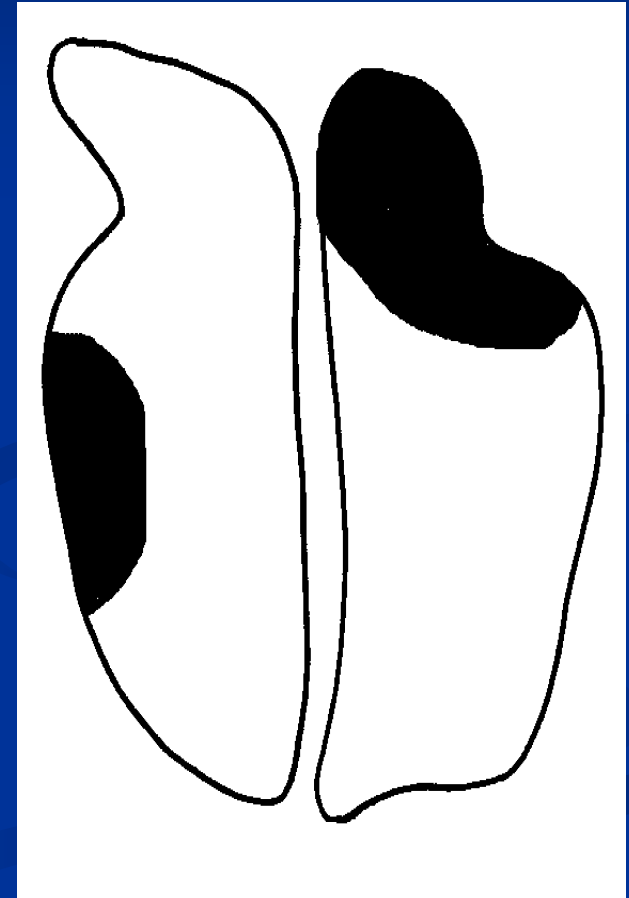


Normal and Pulmonary Edema

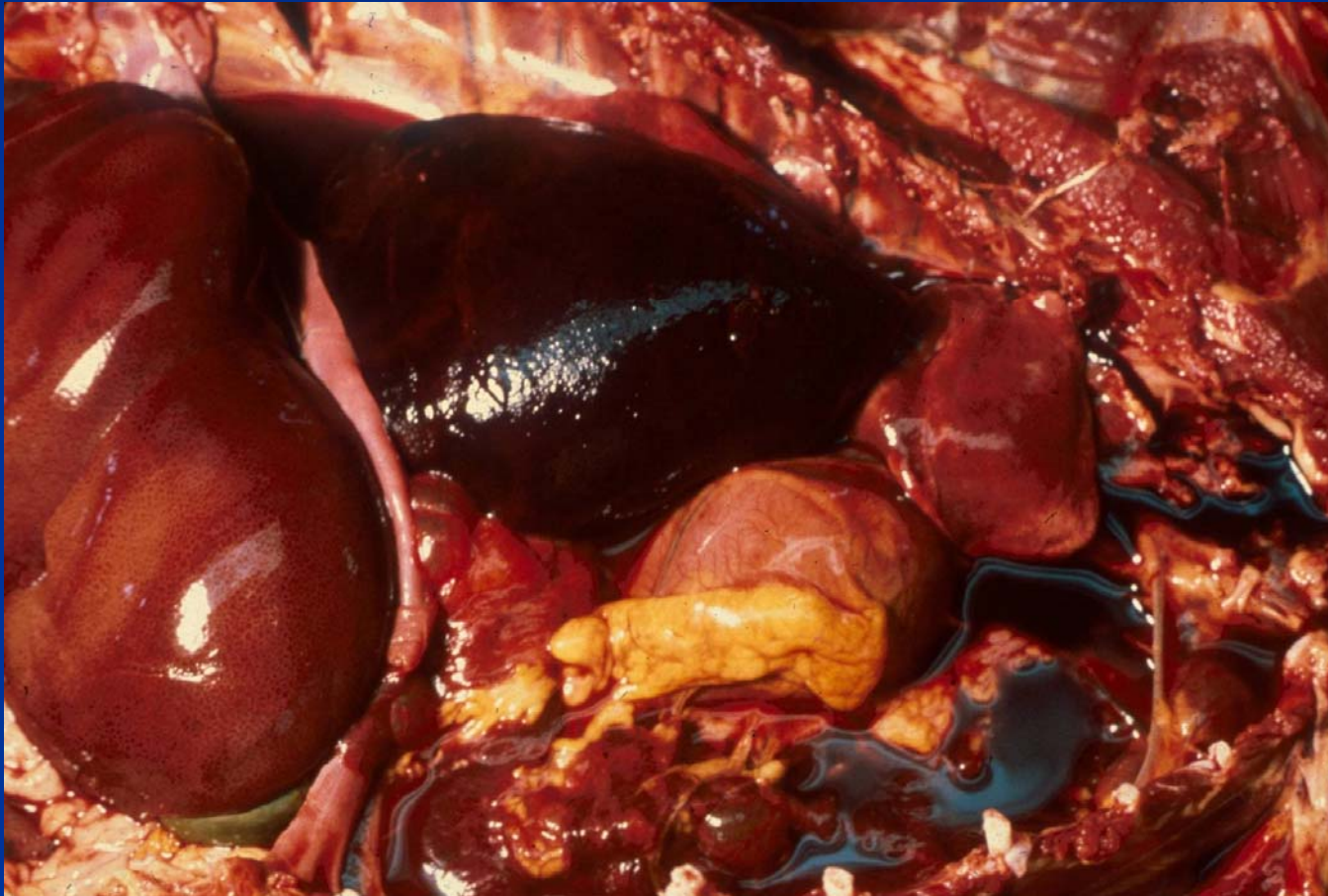


Locally Extensive Pulmonary Disease

- Cranioventral bronchopneumonia
 - Bacterial
 - Aspiration
- Granulomatous pneumonia
- Other: lobe torsion

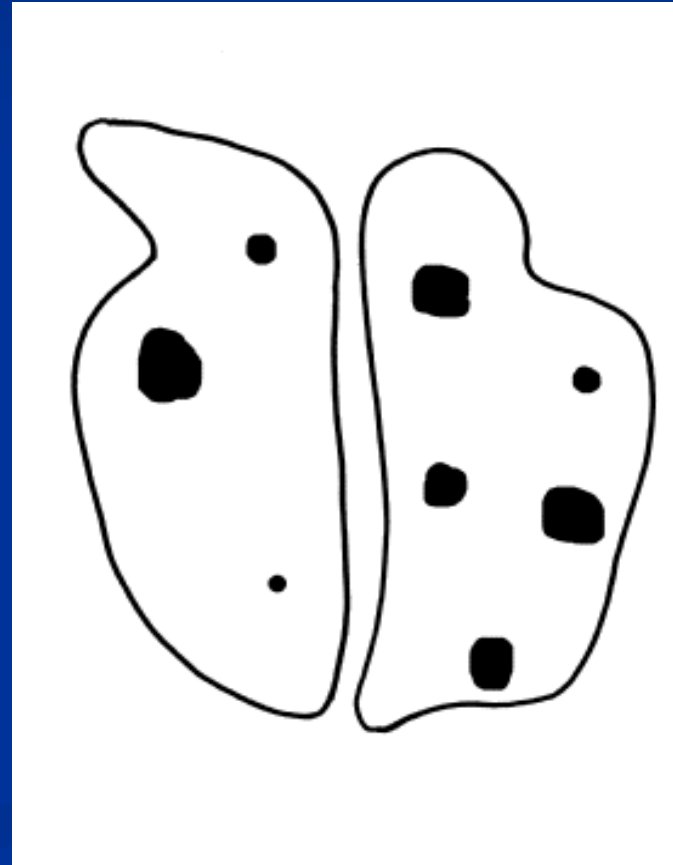


Locally Extensive Pulmonary Disease – Lobe Torsion - Dog



Focal/Multifocal Pulmonary Disease

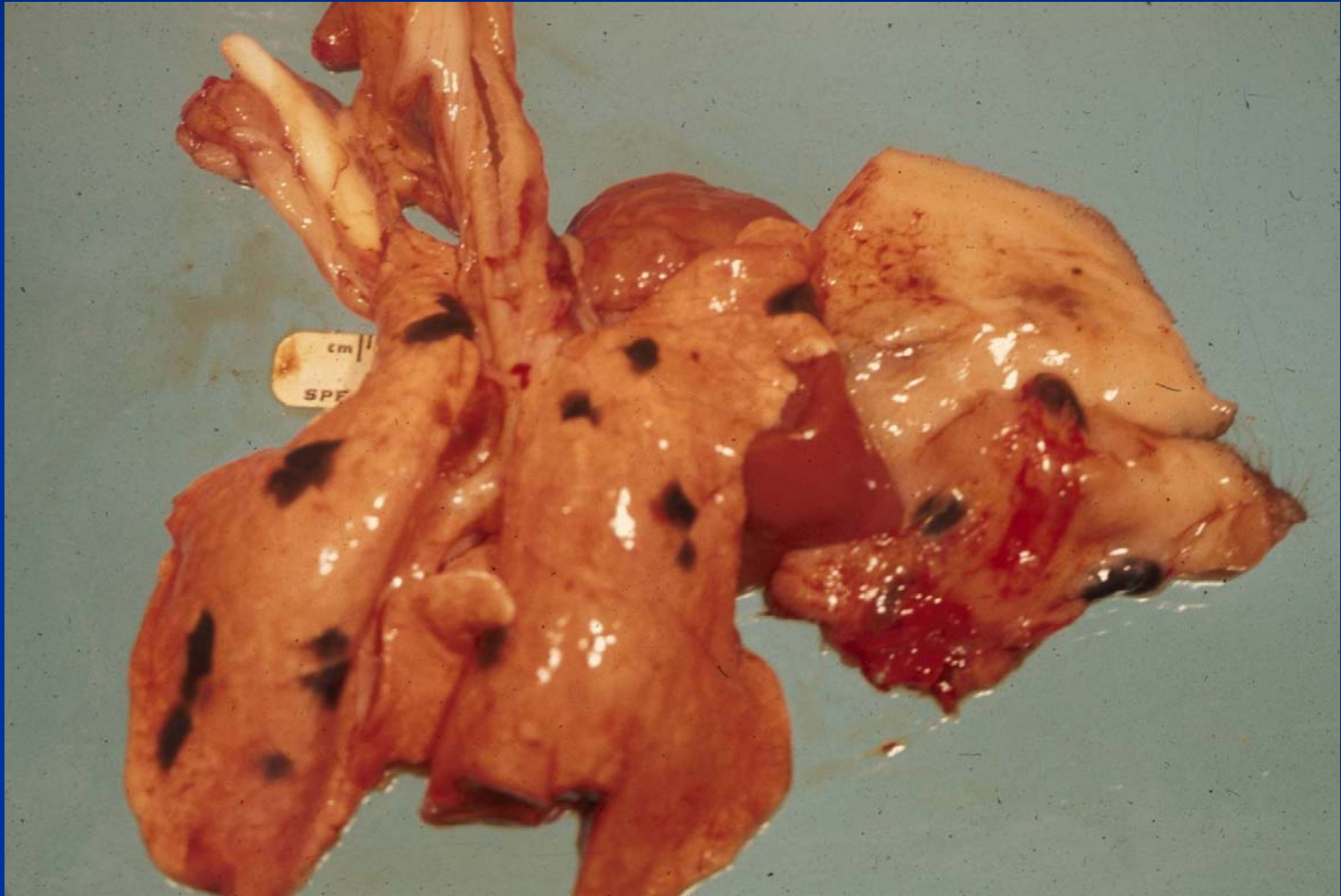
- Abscess
- Granuloma
 - Bacterial
 - Mycotic
 - Parasitic
 - Particulates
- Infarct
- Neoplasia



Developmental Lung Anomalies

- RARE
- Accessory lungs
- Pulmonary hypoplasia – cattle
- Pulmonary cyst
- Surfactant deficiency – horses
- Melanosis – pigs, cattle, sheep
- Bronchial hypoplasia with lobar emphysema– dogs

Developmental Lung Anomalies



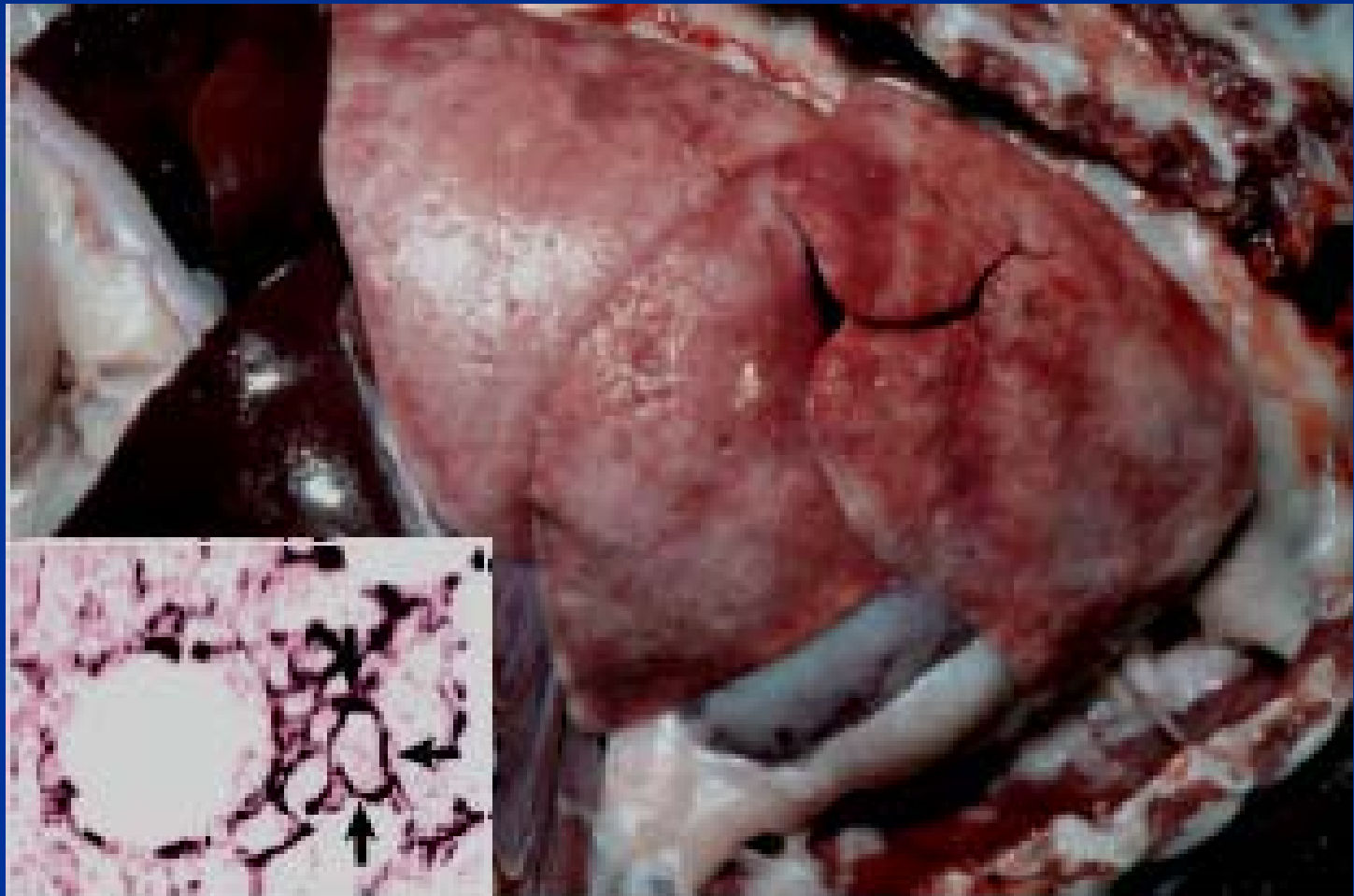
Developmental Abnormalities

- Pulmonary hypoplasia
 - Genetic
 - Primary, e.g., viral: border disease, swine influenza, Menangle virus.
 - Secondary, e.g., to diaphragmatic hernia.
- Surfactant deficiency - diffuse atelectasis.
 - Prematurity, e.g., lambs.
 - Hyaline membrane disease ("barkers") in foals, pigs

Pulmonary Mineralization

- Diffuse lesion (pumice lung)
 - Etiology
 - Uremia
 - Primary hyperparathyroidism
 - Hypercalcemia of malignancy
 - Vitamin D toxicosis
 - Gross and microscopic – interstitial pneumonia
 - Other organs affected
- Focal microlithiasis – old dogs

Pulmonary Mineralization -Dog



Abnormalities of Inflation – Emphysema

- Air in tissues
- Alveolar emphysema
 - Rupture of alveolar septa - human
 - Equine pulmonary emphysema (COPD, heaves)
- Interstitial emphysema (cattle)
 - Air in the interlobular septae and subpleurally
- Focal: secondary to atelectasis, scarring, incomplete obstruction of airways, or pneumonia.
- Senile "emphysema" - aged dogs, cats, horses