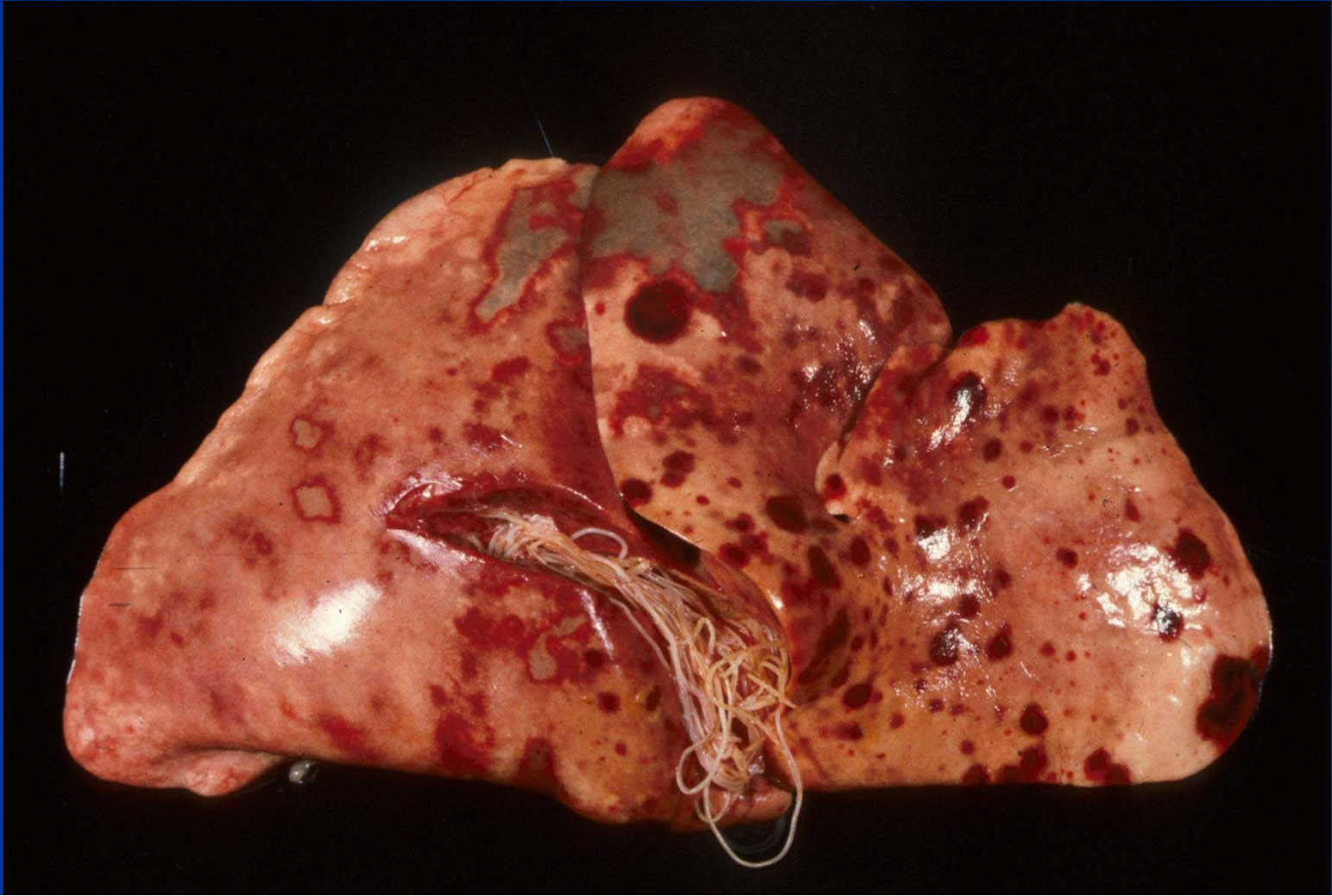
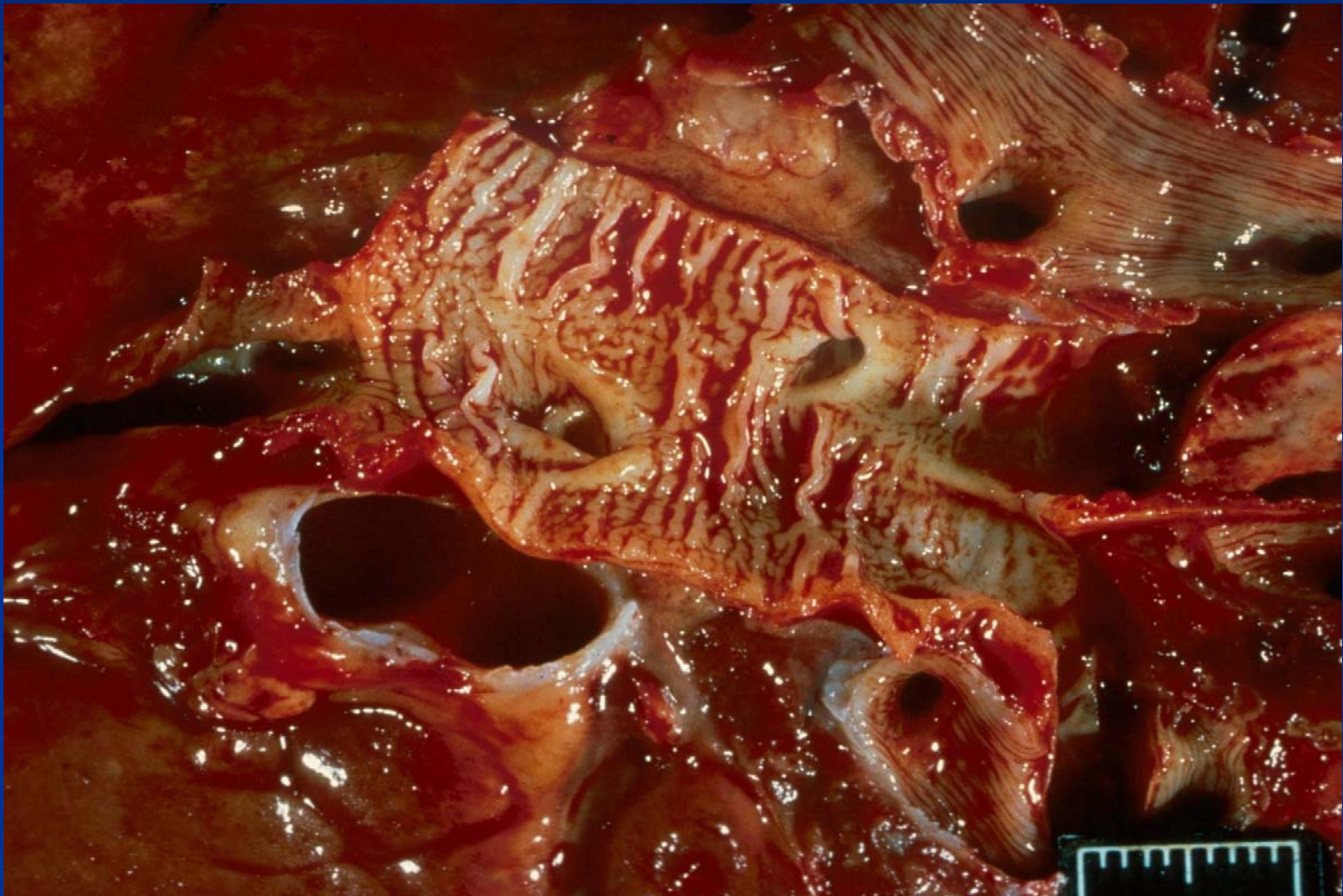


Infarcts Secondary to Dirofilariasis in the Dog



Intimal Hypertrophy Secondary to Dirofilariasis in the Dog



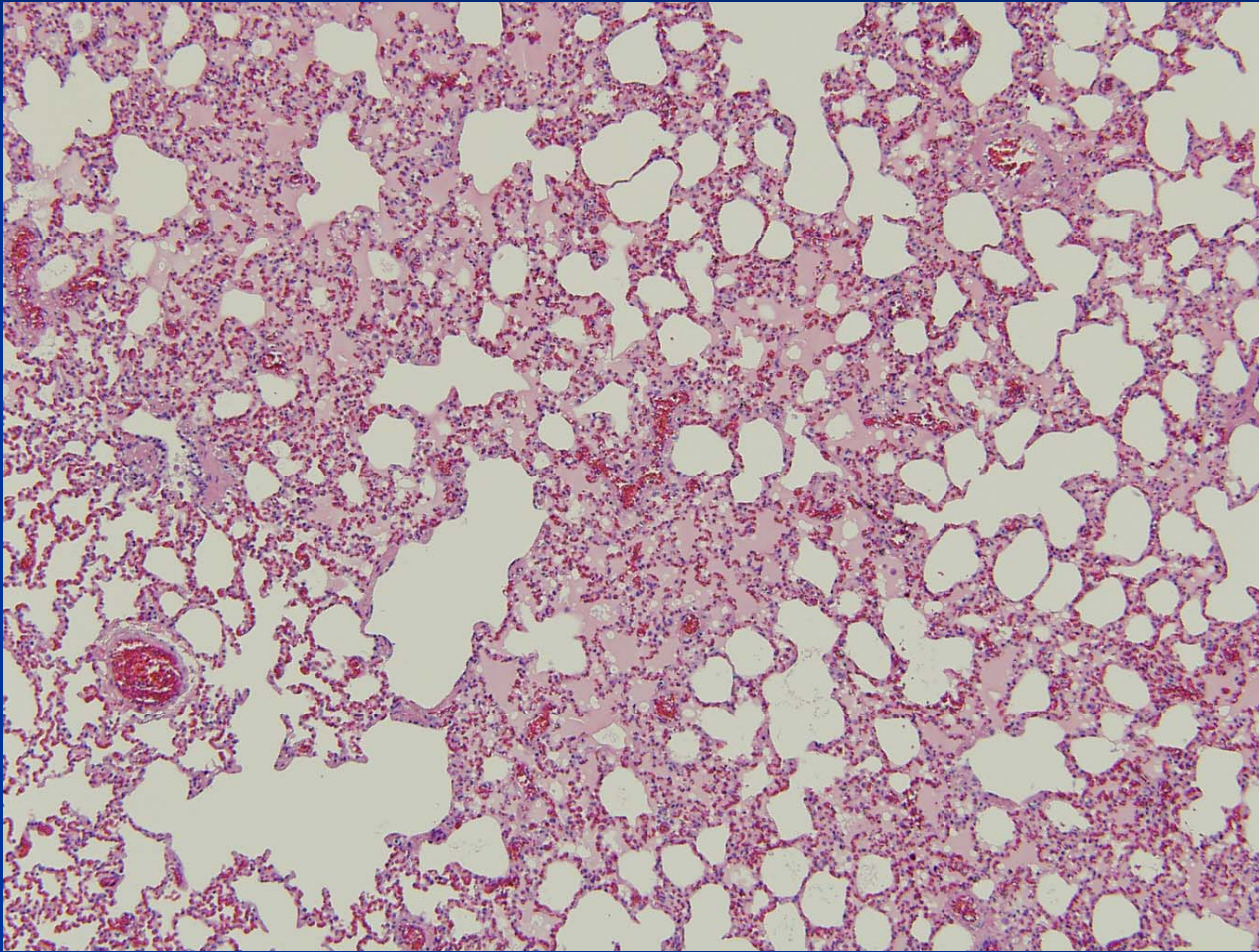
Pulmonary Edema

- Cardiogenic edema
 - Increased capillary hydrostatic pressure
 - Very common in both cats and dogs
- Decreased plasma oncotic pressure
 - Hepatic or renal disease
 - Protein losing enteropathy
 - Iatrogenic fluid overload

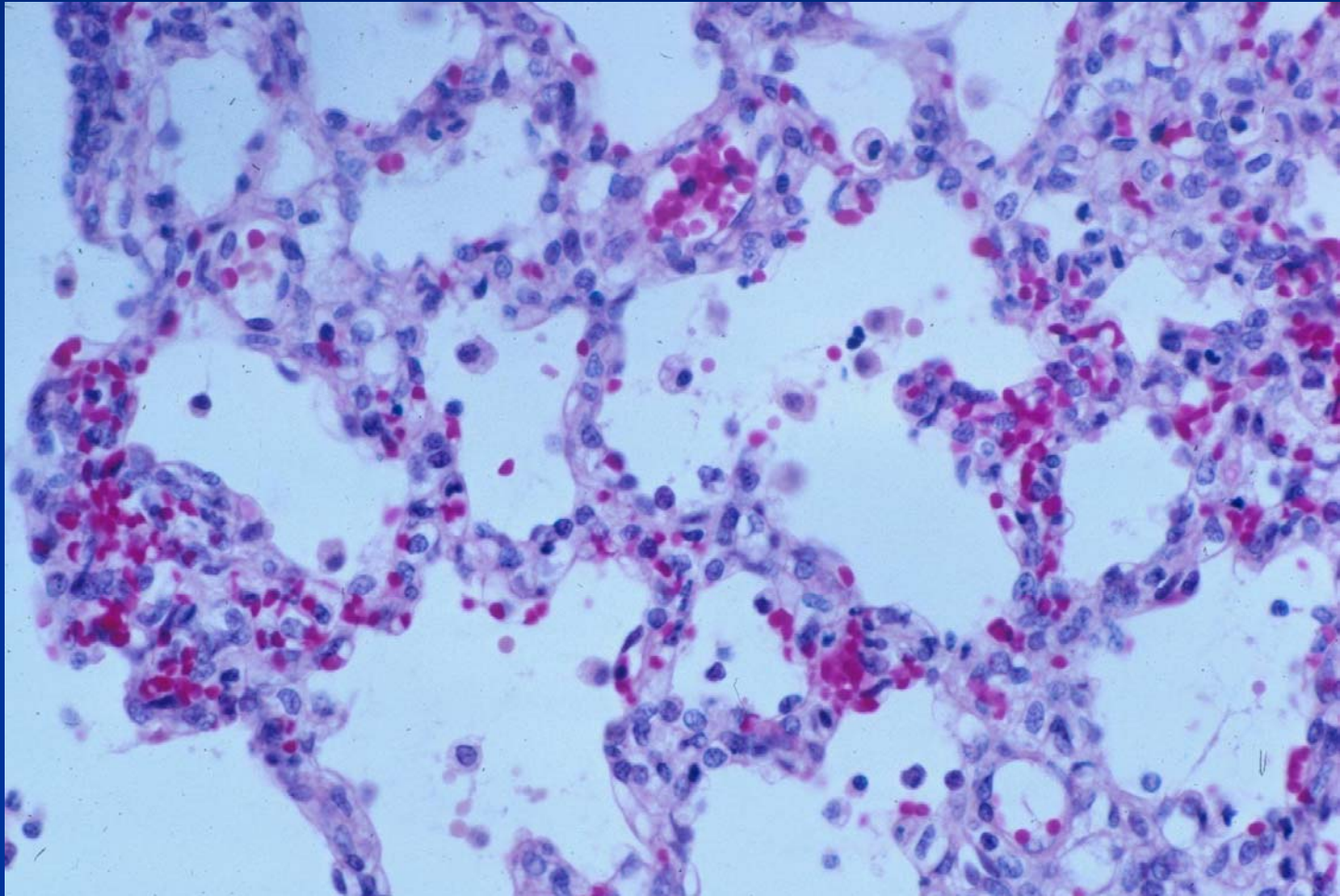
Pulmonary Edema

- Increased permeability of air-blood barrier
 - Airway obstruction
 - Infection
 - DIC
 - Toxic exposure e.g. smoke inhalation, acute paraquat

Cardiogenic Edema—Dog

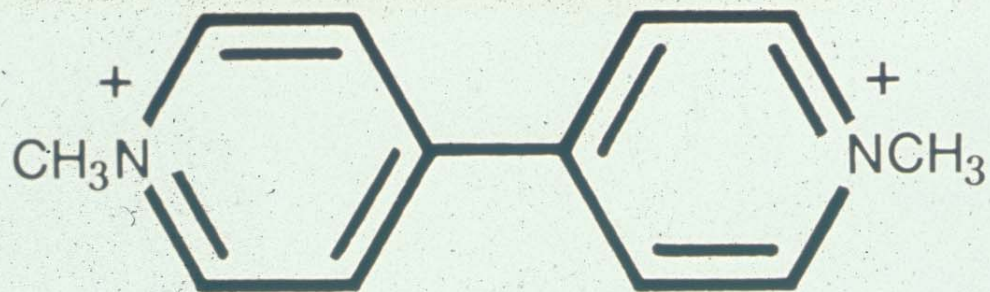


Cardiogenic Edema – Parvovirus in the Dog

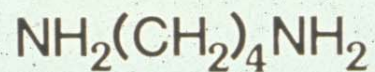


Pulmonary Toxicants

- Paraquat
 - Herbicide with selective uptake by lung
 - Edema, interstitial pneumonia (ARDS), fibrosis
- Vitamin D – mineralization
 - Cholecalciferol in rat bait
 - Excessive amounts in feed (accidental)
- Particulates – pneumoconiosis, fibrosis
- Aspirated material
- Uremia – mineralization



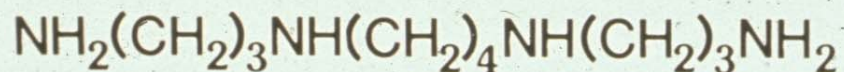
paraquat



putrescine



spermidine



spermine

Pulmonary Mineralization

- Diffuse lesion (pumice lung)
 - Etiology
 - Uremia
 - Primary hyperparathyroidism
 - Hypercalcemia of malignancy
 - Vitamin D toxicosis
 - Cholecalciferol from rat bait
 - Excess in feed
 - Other organs affected
- Focal microlithiasis – especially aged dogs

Pneumoconiosis

- Anthracosis
 - Species: e.g. dogs, humans living in cities
 - Disease: benign accumulation of carbon
- Silicosis in carnivores in zoo exhibits