

Chronic Interstitial Pneumonia of Uncertain Etiology in a Pionus Parrot

Kelly Maxwell-Watkins, NC State University College of Veterinary Medicine, Raleigh, NC
Oscar Fletcher, DVM, PhD, NC State University College of Veterinary Medicine, Raleigh, NC
John Barnes, DVM, PhD, NC State University College of Veterinary Medicine, Raleigh, NC
Tahseen Aziz, DVM, PhD, NC Rollins Veterinary Diagnostic Laboratory, Raleigh, NC

CASE HISTORY

- 5 yr old M Pionus parrot
- 3 yr history of respiratory disease
- Treated with Baytril, Doxycycline, and Amphotericin
- No response to antimicrobials

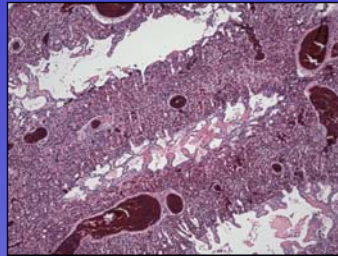


Figure 1

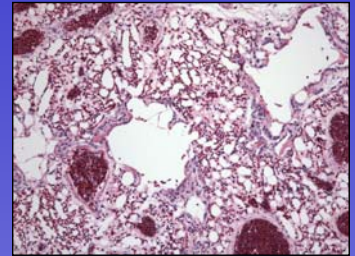


Figure 2 – normal lung

HISTOLOGICAL FINDINGS

- **LUNG:** severe interstitial pneumonia (Figure 1)
 - Loss of air capillaries; cuboidal atrial epithelium (Figures 3, 4)
 - Eosinophilic proteinaceous material in air capillaries (Figure 4)
 - Lymphocytic, plasmacytic, histiocytic infiltrate (Figures 5, 6)
 - Severe congestion
- **SPLEEN:** severe congestion of red pulp sinusoids (Figures 7, 8)
 - Thymus-dependent lymphoid depletion (Figures 7, 8)
 - Increased numbers of bursa-dependent lymphoid follicles (Figures 7, 8)
- **OTHER:** severe congestion in kidneys, liver, intestinal wall

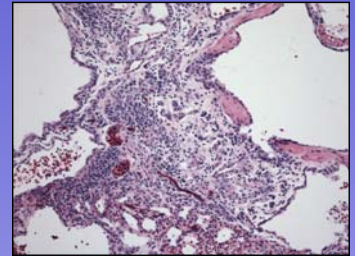


Figure 3

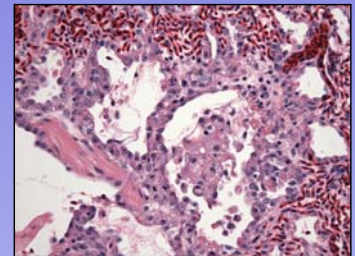


Figure 4

MORPHOLOGICAL DIAGNOSIS

- Chronic lymphocytic, plasmacytic, histiocytic interstitial pneumonia
- Severe congestion of lungs, liver, spleen, kidneys, and intestinal wall

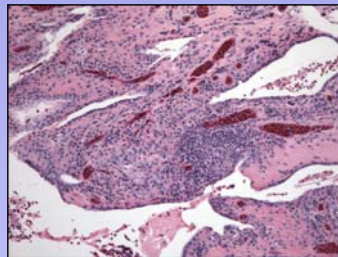


Figure 5

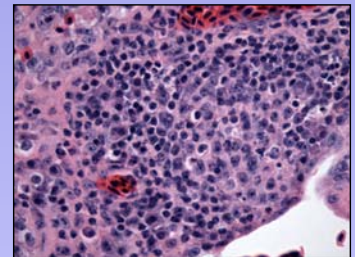


Figure 6

DISCUSSION

- Interstitial lung diseases are poorly characterized in veterinary medicine
- Interstitial lung diseases in human medicine are more common
 - Bird fancier's pulmonary hypersensitivity/hypersensitivity pneumonitis
- Anecdotal findings in Blue and Gold Macaws of pulmonary hypersensitivity syndrome
 - Highly susceptible to airborne irritants
 - Associated with poor ventilation and interspecies housing
- Speculative diagnosis of pulmonary hypersensitivity syndrome in a Pionus parrot

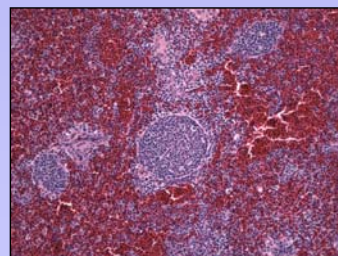


Figure 7

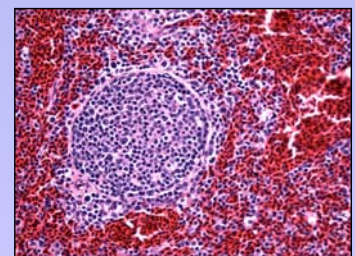


Figure 8

