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Doctor: -	Date: September 14, 2010
Clinic: Bat World Sanctuary 217 N. Oak Avenue Mineral Wells TX 76067	Access: V106043-3 Species: Eptesicus fuscus Breed: Big Brown Bat Sex: Female Name: Fuzzy
ISIS: -	Age: 6 Weeks Type: Post mortem jar

CLINICAL INFORMATION

This infant was received from the wildlife center in St. Louis, Missouri. It is very friendly and not aggressive. Fur is always a little less developed than normal, and this is a very slow eater. It also appears to be a slow learner and having problems swallowing and eating.

MICROSCOPIC

Submitted is the entire bat preserved for examination.

Tongue: No lesion recognized.

Lymph node: Examined is a mesenteric lymph node. No lesion is recognized.

Spleen: The spleen is mildly autolyzed. There is some lymphocytolysis noted. Some areas of the spleen have lymphoid follicles, which are supporting cell debris.

Thymus gland: No lesion recognized.

Heart: Examined is a longitudinal section through the ventricle, atria, and great vessels of the heart. There is some mild hemorrhage into the myocardium, particularly of the ventricles. There is an apparent dilation of the left ventricle. The apparent interventricular septum is as thick as the right and left ventricle.

Lung: The lung is flooded with proteinaceous fluid and a proliferation of numerous alveolar macrophages, which contain abundant intracytoplasmic somewhat granular golden-brown pigments as well as exhibiting erythrophagocytosis. There are interstitium perivascular and peribronchial proliferations of lymphocytes and small numbers of plasma cells. The lung is congested and collapsed. Occasionally, multinucleate cells are recognized within the alveolar spaces.

Kidney: Examined are sections through the cortex and medulla of the kidney. These sections are variably and moderately autolyzed.

Eye: Examined is a section of the globe of the eye. This includes the sclera, retina, some of the periocular soft tissues, and optic nerve. No lesion is recognized.

Continued

Urinary bladder: No lesion recognized.

Stomach: No lesion recognized.

Haired skin: Examined is a section of haired skin. No lesion is recognized.

Skeletal muscle: No lesion recognized.

Pinna of the ear: No lesion recognized.

Liver: The liver is supporting random multifocal areas of neutrophilic infiltrates into the parenchyma. There is a very mild disruption of the hepatic cords.

Brown fat: No lesion recognized.

Gallbladder: No lesion recognized.

Salivary gland: No lesion recognized.

Cerebrum: No lesion recognized.

Intestines: No lesion recognized.

Thyroid gland: No lesion recognized.

Esophagus: No lesion recognized.

Wing web: No lesion recognized.

DIAGNOSIS

- 1) **LUNG: SEVERE DIFFUSE INTERSTITIAL PNEUMONIA WITH SEVERE ALVEOLAR HISTIOCYTOSIS**
- 2) **HEART: POSSIBLE DILATED CARDIOMYOPATHY**
- 3) **LIVER: MILD MULTIFOCAL ACUTE HEPATITIS**

COMMENT

The primary lesions identified in this bat are within the heart and lung. Based on the presence of the alveolar histiocytosis and the subgross to histologic changes noted of the heart, I suspect that this bat has an underlying cardiomyopathy. It appears to be a dilated cardiomyopathy. This may have been a condition the bat was born with.

There is a secondary inflammatory lesion recognized both in the lung as well as in the liver. The lung lesions are consistent with some of the changes noted in other bats that previously have been diagnosed with mycoplasma. We can consider testing specifically for mycoplasma.

There is also evidence of a very acute most likely systemic infection, possibly a secondary bacterial endotoxemia, which would account for the lesions in the liver.

No significant findings are noted in the section through the brain. Underlying heart disease could account for any slow development noted of the bat.

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