

Dr. Drury R. Reavill  
Dr. Robert E. Schmidt  
**Zoo/Exotic Pathology Service**  
6020 Rutland Drive #14  
Carmichael CA 95608-0515

<b>Doctor:</b> -	<b>Date:</b> November 23, 2015
<b>Clinic:</b> Bat World Mid Cities 701 Timberline Court Arlington, TX 76006	<b>Access:</b> V152721 <b>Species:</b> Chiroptera <b>Breed:</b> Lasiurus Intermedius <b>Sex:</b> Female <b>Name:</b> Mamie
<b>ISIS:</b> BWMC-L1-003	<b>Age:</b> Adult <b>Type:</b> Post mortem jar

---

**CLINICAL INFORMATION**

This is an adult female from a rehabber in Houston. It was originally brought in in February 2015 with a jaw injury and pregnant. It was determined not to be releasable. On November 11, she was agitated and vomited part of her food and was found dead the next day.

**MICROSCOPIC**

Submitted is the entire animal preserved for examination.

Lung: The lung is moderately autolyzed. There are multifocal areas of lymphoplasmacytic proliferations within the interstitium, particularly surrounding vessels. Some small foci of neutrophilic infiltrates into the alveolar spaces are also recognized.

Esophagus: No lesion recognized.

Trachea: Within the lumen of the trachea and through the lining mucosal epithelium are neutrophilic proliferations associated with fibrin and edema. Cell debris is also prominent.

Heart: Examined is a longitudinal section through the ventricle, atria, and great vessels of the heart. No lesion is recognized.

Oviduct and uterus: No lesion recognized.

Large intestine: No lesion recognized.

Adrenal gland: Adrenal gland is moderately autolyzed.

Kidney: Examined are sections through the cortex and medulla of the kidney. These are moderately autolyzed. In the renal sections, there are thin rod-shaped densely packed bacteria, which are present within the capillaries of the glomerular mesangium.

Skin from wing web: No lesion recognized.

Eye: Examined is a section through the globe of the eye. No lesion is recognized.

Ovary: No lesion recognized.

CONTINUED

Tongue: There are yeast organisms proliferating within the superficial keratin of the tongue and subtended by neutrophilic infiltrates. These are yeast organisms with pseudohyphae.

Liver: The liver is supporting multifocal areas of necrosis with large numbers of bacteria, which are small pleomorphic thin rod-shaped bacteria associated with dense surrounding aggregates of viable and degenerated neutrophils. These are randomly throughout the liver parenchyma.

Urinary bladder: No lesion recognized.

Intestines: No lesion recognized.

Spleen: The spleen is supporting multifocal extensive areas of splenic necrosis with cell debris and fibrin.

Stomach: Examined are sections through the stomach of which is moderately autolyzed.

### **DIAGNOSIS**

- 1) **LIVER: MULTIFOCAL DISSEMINATED SUPPURATIVE NECROTIZING BACTERIAL HEPATITIS**
- 2) **KIDNEY: INTRAVASCULAR BACTERIA (BACTEREMIA)**
- 3) **LUNG: FOCALLY EXTENSIVE SUPPURATIVE PNEUMONIA**
- 4) **SPLEEN: MULTIFOCAL PERACUTE SPLENIC NECROSIS**
- 5) **TRACHEA: MODERATE SUBACUTE TRACHEITIS AND INTRALUMINAL INFLAMMATORY EXUDATES**
- 6) **TONGUE: MULTIFOCAL MILD ACUTE GLOSSITIS WITH INTRAKERATIN YEAST AND PSEUDOHYPHAE**

### **COMMENT**

The cause of death is the bacteremia and the extensive bacteria-associated inflammation and necrosis recognized in the liver. The liver has been showered with the thin rod-shaped bacteria. It is unknown where the portal of entry may have been. It is possible this bacteremia may have come from the digestive tract. The respiratory tract is another possibility, and there is extensive inflammation noted of the trachea as well as into the lung.

---

DRURY R. REAVILL, DVM  
DABVP (Avian and Reptile & Amphibian Practice)  
Diplomate, American College of Veterinary Pathologists

DRR:br\*

Q3 KW systemic, infection (bacteria)