# ZOOLOGICAL PATHOLOGY PROGRAM STRANDED CETACEAN NECROPSY REPORT

Field ID: RIB20110111-LA001 Additional Identifier: LA 440 ZPP Accession Number: 11-14Tt

**Species:** *Tursiops truncatus* **Strand Date:** 01-11-11

Strand Location: Grand Terre Beach, LA

Sex: female
Age Class: adult

Necropsy Date: 01-12-11

**Condition code:** 

Total Length: 243.8 cm

Weight:

Blubber Depth: Body Condition:

Gross Necropsy: (on file)

Slides/Tissues Received: 18 regular slides

# **Microscopic Findings:**

Slide 1:

Cardiac atrium: No significant findings (NSF)

Slide 2:

Cardiac ventricle: NSF

Slide 3:

Cardiac ventricle: NSF

Slide 4:

Lymph node: Few small cortical aggregates of macrophages with brown granular pigment.

Lung: A large bronchus contains few luminal nematodes (*Halocercus*). Another has similar nematodes surrounded by moderate numbers of viable and necrotic neutrophils and few erythrocytes. The submucosa contains low numbers of plasma cells, lymphocytes and few eosinophils. Small bronchioles are distorted to obliterated by mural accumulations of dense collagenous fibrous tissue containing numerous lymphocytes and plasma cells. Fibrosis often extends into the surrounding alveolar parenchyma, replacing low numbers of alveoli and distorting/thickening other alveolar septa. Alveoli in these regions contain low numbers of foamy macrophages and eosinophils and moderate quantities of eosinophilic (proteinic) fluid, and some are segmentally lined by Type II pneumocytes.

# Slide 5:

Trachea: The submucosa diffusely contains few scattered plasma cells and lymphocytes.

Skeletal muscle: NSF

Slide 6:

Kidney and lymph node: NSF

Slide 7: Liver: NSF

Spleen: Moderate congestion.

# Slide 8:

Skin with blubber: The superficial dermis has rare, multifocal perivascular lymphocyte and plasma cells.

#### Slide 9:

Skeletal muscle with blubber: NSF

### Slide 10:

Adrenals: NSF

### Slide 11:

Two lymph nodes: Both have few widely scattered eosinophils.

# Slide 12:

Pancreas: NSF

Lymph node: Scattered low numbers of cortical and medullary sinus neutrophils.

### Slide 13:

Small and large intestine: NSF

# Slide 14:

Pancreas: A large duct luminally contains sloughed epithelial cells and few eosinophils and neutrophils. The duct is surrounded by moderately increased dense collagenous fibrous tissue containing moderate numbers of eosinophils and fewer plasma cells and lymphocytes. Fibrous tissue extends deep into the adjacent acinar parenchyma partially replacing one lobule and in the remainder of the lobule, frequent acini are mildly separated by bands of connective tissue. Scattered about are low numbers of eosinophils. Few acinar cells are swollen (degeneration). Distant from the large duct another isolated lobule has similar, lesser changes.

Non-glandular stomach: There are moderately increased (retained) superficial mucosal layers, sparsely populated on surface by mixed bacteria.

**Slide 15**:

Glandular (pyloric) stomach: NSF

Slide 16:

Small and large intestine: NSF

**Slide 17**:

Uterine tube: NSF

Slide 18:

Ovary: Section is composed solely of a large corpus luteum.

## **Final Diagnoses:**

- 1. Moderate, focal, chronic eosinophilic pancreatic dochitis with multifocal pancreatic fibrosis
- 2. Moderate retained gastric mucosa, 1<sup>st</sup> gastric chamber (non-glandular stomach)
- 3. Mild, multifocal, chronic eosinophilic and lymphoplasmacytic bronchitis with intralesional nematodes (consistent with *Halocercus*)

### **Ancillary Test Results:**

None reported at time of this report.

### **Comments:**

The most significant lesions were pancreatic dochitis and retained layers in the non-glandular stomach. Lungworm infection, while grossly severe, was histologically mild to moderate, and associated chronic inflammation was of limited to no clinical significance.

Changes in the pancreas, given the high number of eosinophils, were presumed parasitic (no parasites were observed), and hepatopancreatic trematode infection (*Campula*) has been reported in bottlenose dolphins.

Retained mucosal layers in the non-glandular stomach inferred lack of regular abrasive wear as occurs in hyporexia/anorexia

Reported By:	
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