ZOOLOGICAL PATHOLOGY PROGRAM STRANDED CETACEAN NECROPSY REPORT

Field ID: MRB-20110516-La001 Additional Identifier: La 545 ZPP Accession Number: 13-47Tt

Species: *Tursiops truncatus* **Strand Date:** 5/17/11

Strand Location: Fourthon, LA

Sex: Male Age Class:

Necropsy Date: 5/18/11 Condition code: 2 Total Length: 243.8 cm

Weight:

Blubber Depth: Body Condition:

Gross Necropsy: Gross necropsy report on file.

Slides/Tissues Received: 26 regular slides, 1 large slide.

Microscopic Findings:

Slide 1:

Lung lymph node: There is mild lymphoid depletion. Sinuses contain moderate numbers of red blood cells and plasma cells.

Lung: Multifocally and along the pleural surface are dense accumulations of fibrous connective tissue mixed with numerous congested blood vessels (angiomatosis). Adjacent alveolar septae are mildly thickened by fibrous connective tissue. Multifocally there are a few areas in which alveolar spaces and septae contain small numbers of macrophages, eosinophils, lymphocytes, and less frequent neutrophils.

Slide 2:

Lung: See description under slide 1.

Diaphragm: No significant findings (NSF).

Slide 3:

Right caudal lung: See description under slide 1.

Mucosa: NSF

Tongue: NSF

Slide 4:

Left caudal lung: NSF

Lymph node: There is moderate lymphoid depletion and sinuses contain small numbers of histiocytes.

Slide 5:

Right cranial lung: Regionally alveolar spaces and septae contain moderate numbers of macrophages, fewer eosinophils and lymphocytes, and rare neutrophils. In the affected areas septae are mild to moderately thickened by fibrous connective tissue. Regionally there is dense fibrous connective tissue with numerous thick walled vessels (angiomatosis).

Epididymis: NSF

Slide 6:

Tongue: NSF

Left caudal lung: See description under slide 1.

Trachea: The submucosa diffusely contains small numbers of inflammatory cells.

Slide 7:

Lymph node: There is moderate lymphoid depletion and sinuses contain moderate numbers of macrophages and hemosiderin laden macrophages.

Liver: NSF

Spleen: NSF

Slide 8:

Adrenal gland: NSF

Kidney: NSF

Slide 9: Skin: NSF

Aorta: NSF

Skeletal muscle: NSF

Slide 10:

Heart: NSF

Slide 11: Heart: NSF Slide 12: Heart: NSF

Slide 13: Heart: NSF

Slide 14:

Lymph node: NSF

Intestine: NSF

Slide 15:

Intestine: NSF

Lymph node: There is mild lymphoid depletion.

<u>Slide 16:</u>

Penis/connective tissue: NSF

Skin: NSF

Slide 17: Testis: NSF

Epididymis: NSF

Slide 18:

Cerebrum: NSF

Spinal cord: NSF

Slides 19-24: Cerebrum: NSF

Slide 25:

Cerebellum: NSF

<u>Slide 26:</u>

Cerebellum: NSF

Slide 27: Eye: NSF

Final Diagnoses:

1. Lung: Moderate to marked multifocal angiomatosis

- 2. Lung: Mild to moderate multifocal chronic histiocytic, lymphocytic and eosinophilic pneumonia
 - 3. Lymph nodes (several): Mild to moderate lymphoid depletion
 - 4. Trachea: Mild diffuse chronic tracheitis

Ancillary Test Results:

Bacterial culture results on file.

Comments:

Cause of death was not evident in the tissues examined. Autolysis was moderate.

There was moderate to marked angiomatosis in all sections of the lung examined. Though angiomatosis is a common finding in dolphins from the Gulf of Mexico the changes in this dolphin were more severe than what is usually noted. There was a mild degree of inflammation in multiple areas of the lung, possibly due to resolving lungworm infection.

Lymphoid depletion was noted in several, but not all of the lymph nodes examined. Though morbillivirus infection is a top differential for lymphoid depletion in dolphins no syncytial cells were found. In addition the spleen was within normal limits with normal lymphoid follicle formation. Given these findings and that this dolphin appeared to be in good body condition with ample histologically apparent adipose tissue, morbillivirus infection is probably less likely in this case. Still, follow-up PCR on frozen tissues for morbillivirus may be warranted.

Reported By	y:			
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