

**ZOOLOGICAL PATHOLOGY PROGRAM
STRANDED CETACEAN NECROPSY REPORT**

Field ID: 61IMMS061110
Additional Identifier: D-0013 (Alternate field ID); 10-241C (slide accession number)
ZPP Accession Number: 11-042Tt
Species: *Tursiops truncatus*
Strand Date: 06-11-10
Strand Location: Ocean Springs, MS
Sex: male
Age Class: Adult
Necropsy Date: 06-11-10
Condition code: 3
Total Length: 226 cm
Weight:
Blubber Depth:
Body Condition:

Gross Necropsy: Gross report not available at time of histologic evaluation.

Slides/Tissues Received: 27 regular slides.

Microscopic Findings: Autolysis is moderate in most tissues, severe in few. There is widespread colonization by moderate numbers of postmortem bacilli.

Slide 1:

Brain: No Significant Findings (NSF)

Lymph node: NSF

Slide 2:

Lymph node: NSF

Penis: NSF

Testis: NSF

Slide 3:

Heart: NSF

Pancreas: NSF

Lymph node: Sinuses contain low numbers of neutrophils. Besides large postmortem bacilli are moderate numbers of coccobacilli, also throughout sinuses.

Slide 4:

Heart: NSF

Lymph node: There are large numbers of follicles; few have hyaline central material. Sinuses contain low numbers of neutrophils.

Lymph node: NSF (severe autolysis)

Slide 5:

Skeletal muscle and adjacent gland (salivary, presumptive): NSF

Lymph node: NSF

Lung: There are few small regions of fibrosis centered on bronchiolar remnants and replacing small quantities of alveolar parenchyma. Remnant lumens contain mineralized debris, necrotic nematode remnants, and or low numbers of plasma cells and lesser lymphocytes and macrophages. In some areas, similar inflammatory cells are within the surrounding fibrous tissue. Regionally the pleura and subpleural interstitium are expanded by moderate quantities of dense collagenous fibrous tissue containing frequent arterioles.

Slide 6:

Adrenal: NSF

Intestine: NSF (severe autolysis)

Slide 7:

Lymph node (mesenteric, presumptive): NSF

Fundic stomach: NSF

Slide 8:

Diaphragm: NSF

Fundic stomach: NSF

Slide 9:

Ampulla: NSF

Liver: Many hepatocytes contain a single, small, colorless vacuole (lipid). Few hepatocytes contain low quantities of granular brown pigment.

Heart: NSF

Slide 10:

Skeletal muscle: NSF

Lymph node: There are rare neutrophils in cortical sinuses and minimally increased numbers of cortical and medullary plasma cells.

Slide 11:

Eye: NSF

Slide 12:

Eye: NSF

Slide 13:

Thymus: NSF

Lymph node: Sinuses throughout contain low to moderate numbers of neutrophils and few erythrocytes.

Heart: NSF

Slide 14:

Colon: A single crypt contains a small luminal mineral concretion.

Aorta: NSF

Lung: NSF

Slide 15:

Testis: NSF

Spleen: NSF

Slide 16:

Intestine: NSF

Esophagus: NSF

Heart (atrium): NSF

Slide 17:

Pancreas: NSF

Urinary bladder: NSF

Lymph node: NSF

Slide 18:

Non-glandular stomach: There are mildly increased surface layers.

Thyroid: NSF

Slide 19:

Epithelium, (possible pharyngeal): The epithelium is moderately hyperplastic, with short, broad, often branching rete ridges. Within rete ridges the basal layer is uniform and composed of small cuboidal cells. The remaining rete ridge cells are large, with abundant pale eosinophilic cytoplasm and frequently have a perinuclear colorless halo or cytoplasmic colorless vacuole (intracellular edema). Higher, some cells have similar though lesser edema. Surface layers are fragmented/ragged.

Slide 20:

Skin with blubber: NSF

Slide 21:

Brain: NSF

Slide 22:

Brain: NSF

Slide 23:

Brain and pituitary gland: NSF

Slide 24:

Brain: NSF

Slide 25:

Brain: NSF

Slide 26:

Brain: NSF

Slide 27:

Brain: NSF

Final Diagnoses:

1. Mild drainage reaction, few lymph nodes
2. Mild, multifocal, chronic bronchiolitis with intralesional nematode remnants
3. Mild, regional, pulmonary angiomas

Comments:

Neutrophils in sinuses of few lymph nodes was indicative of drainage of a site of inflammation. However no significant inflammatory lesion was noted in any other reviewed tissue. Coccobacilli were noted in the affected node and this bacterial morphology is not typical for postmortem overgrowth bacteria and bacterial infection remains an important differential.

Chronic bronchiolitis was consistent with resolved lungworm infection. This and mild pulmonary angiomas were incidental findings.

Reported By:

Michael J. Kinsel DVM, Dip ACVP
October 04, 2011