

**ZOOLOGICAL PATHOLOGY PROGRAM  
STRANDED CETACEAN NECROPSY REPORT**

**Field ID:** MCT-20110330-LA003  
**Additional Identifier:** LA498  
**ZPP Accession Number:** 12-18Sa  
**Species:** *Stenella attenuata*  
**Strand Date:** 03-30-11  
**Strand Location:** EEZ, LA  
**Sex:** male  
**Age Class:** Subadult  
**Necropsy Date:** 03-31-11  
**Condition code:** 2  
**Total Length:** 198 cm  
**Weight:**  
**Blubber Depth:**  
**Body Condition:**

**Gross Necropsy:** Gross report available at time of histologic evaluation.

**Slides/Tissues Received:** 26 regular slides and 1 oversized slide.

**Microscopic Findings:** Autolysis is mild, limited to GI sections and no postmortem bacteria are noted in (other) tissue sections.

Slide 1:

Kidney: The kidney has moderate, multifocal congestion.

Adrenal (2): Both adrenals have moderately severe, multifocal cortical congestion.

Slide 2:

Lung: The lung has mild to moderate, multifocal, congestion, edema and hemorrhage. The submucosa of one bronchiole and the surrounding interstitium contain low numbers of lymphocytes, plasma cells and macrophages. Scattered throughout the remainder of the interstitium are minimal accumulations of similar cells.

Spleen: White pulp contains numerous follicles (reactive hyperplasia).

Lymph node: The cortex contains few large follicles with scant paracortex. Sinuses contain low numbers of neutrophils and macrophages.

Slide 3:

Lung with mainstem bronchus: There is marked, diffuse congestion with multifocal hemorrhage.

Large caliber artery with thymus: No Significant Findings (NSF)

Slide 4:

Lung: As for Slide 3.

Diaphragm: NSF

Slide 5:

Lung (2): as for Slide 3.

Trachea: NSF

Pharynx: NSF

Slide 6:

Liver: There is diffuse moderate congestion. In two small regions there are few closely apposed moderately dilated sinusoids with luminal colorless space and moderate compression of adjacent hepatocytes.

Lymph node: NSF

Slide 7:

Prescapular lymph node: Sinuses multifocally contain numerous extravasated erythrocytes.

Proximal esophagus and trachea/glottis: NSF

Slide 8:

Heart (2): Few small thin-walled vessels are markedly dilated. A rare, similarly sized colorless space without apparent lining endothelium is also noted.

Slide 9:

Heart (2): One piece has moderate adjacent mediastinal hemorrhage with congestion in a minimal included fragment of lung. The second section of heart has changes as for slide 8, with slightly greater numbers of colorless spaces with no apparent endothelial lining.

Slide 10:

Heart: As for slide 8.

Great vessel: NSF

Pituitary: NSF

Slide 11:

Intestine (2): NSF

Slide 12:

Colon with mesocolon: The mesocolon contains a 1.5x0.7 cm parasitic cyst centrally containing a single, large acoelomate metazoan with no digestive tract and calcareous corpuscles (cestode), and moderate to large numbers of macrophages, and lesser neutrophils, plasma cells, lymphocytes and rare eosinophils. The cyst wall is a thick band of dense collagenous, moderately vascular fibrous tissue containing moderate numbers of macrophages, plasma cells and neutrophils; some macrophages contain granular tan pigment.

Slide 13:

Skeletal muscle and connective tissue: There are two large cestode cysts as for slide 13.

Slide 14:

Urinary bladder: The submucosa contains a rare, mildly compressive, ovoid colorless space.

Testis: NSF

Pancreas: Two ducts are surrounded by low to moderate numbers of lymphocytes.

Slide 15:

Penis: NSF

Colonic lymph node: Cortical follicles are numerous and have large germinal centers. The paracortex has numerous/moderately increased numbers of lymphocytes (reactive hyperplasia).

Slide 16:

Skin with blubber: The blubber contains portions of two parasitic cysts as for slide 12.

Lymph node: The node is diffusely moderately congested and sinuses contain low numbers of erythrocytes.

Slide 17:

Skin with blubber and skeletal muscle: NSF

Mesenteric lymph node: Mild reactive hyperplasia as for Slide 15, colonic lymph node.

Slide 18:

Brain: Scattered in grey and white matter low numbers of up to 325 µm round to oval colorless spaces with minimal compression of surrounding neuropil. Scattered vessels are moderately dilated.

Slide 19:

Brain: As for slide 18.

Slide 20:

Brain: As for slide 18.

Slide 21:

Brain: As for slide 18 though somewhat more extensive. Section is from ventral aspect of cerebrum and midbrain, presumptive.

Spinal cord: There are rare colorless spaces as for slide 18.

Slide 22:

Brain: As for slide 18.

Slide 23:

Brainstem: As for slide 18.

Cerebellum: NSF

Slide 24:

Cerebellum: As for slide 18, though minimal.

Slide 25:

Cerebellum and brainstem: As for slide 18.

Slide 26:

Eye: NSF

Slide 27:

Rib/bone marrow: NSF

**Final Diagnoses:**

1. Mild to moderate, multifocal, cerebral gas accumulation
2. Moderate, diffuse, pulmonary congestion with multifocal hemorrhage
3. Mild to moderate renal, adrenal, hepatic and lymph node congestion
4. Multiple encysted cestodes; mesocolon, skeletal muscle connective tissue and blubber

**Comments:**

The most significant finding was the presence of colorless spaces in the brain parenchyma, most consistent with gas accumulation. Tissues are well preserved with no evident postmortem bacteria therefore changes were considered real and not artifact. Gas accumulation in the neuropil was presumed due to barotrauma related to net entrapment underwater. Rare similar colorless spaces or apparent intravascular gas accumulation noted in heart, liver and urinary bladder were related.

Multicentric congestion and pulmonary hemorrhage were agonal changes.

Multicentric encysted cestodes were a common incidental finding.

Reported By:

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August 01, 2012