

**ZOOLOGICAL PATHOLOGY PROGRAM
STRANDED CETACEAN NECROPSY REPORT**

Field ID: MSB-20110501-LA001
Additional Identifier: BP-2011-LA539, 4390
ZPP Accession Number: 13-21Tt
Species: *Tursiops truncatus*
Strand Date: 05-01-2011
Strand Location: Grande Isle, LA
Sex: female
Age Class: pup/calf
Necropsy Date: 05-08-2011
Condition code: fresh dead
Total Length: 114.3 cm
Weight:
Blubber Depth:
Body Condition:

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

Slides/Tissues Received: 19 regular slides and 2 large format slides.

Microscopic Findings: Autolysis is moderate to severe; widespread colonization by generally large numbers of postmortem bacteria. Some tissues such as lymph node and skeletal muscle, contain frequent cavitated (gas-filled) areas.

Slide 1:

Kidney (2): No significant lesions (NSF).

Slide 2:

Kidney (2): NSF

Slide 3:

Lung (2): The lungs are partially inflated. Some alveoli are fully expanded; others are less so with undulant, thick septa. Many alveoli contain few, up to moderate numbers of macrophages and neutrophils. Scattered alveoli contain one or more (amniotic) squames. Small caliber bronchioles are similar to alveoli. Low numbers of large bronchioles and small and medium caliber bronchi contain 2-9 cross sections of adult nematodes with internal embryonated larva, morphologically compatible with *Halocercus*.

Slide 4:

Lymph node (3): NSF

Glandular tissue, adrenal presumptive (2): NSF

Lung: as for Slide 3.

Slide 5:

Spleen: NSF

Pancreas: NSF

Slide 6:

Tongue: NSF

Skeletal muscle: NSF

Thymus: NSF

Connective tissue with scant skeletal muscle, no other identifying feature [rule out esophagus and or pharynx] (2): NSF

Slide 7:

Liver (2): NSF

Slide 8:

Heart (3): NSF

Slide 9:

Heart (2): NSF

Diaphragm: NSF

Slide 10:

Cervix: NSF

Uterus: NSF

Urachus and umbilical arteries (2) NSF

Slide 11:

Intestine (6): NSF

Ovary (2): NSF

Oviduct: NSF

Slide 12:

Intestine (4): NSF

Colon with colonic lymph node: NSF

Slide 13:

Intestine (4): NSF

Slide 14:

Urinary bladder (2): NSF

Esophagus: NSF

Slide 15:

Trachea: NSF

Aorta: NSF

Slide 16:

Skin with blubber (2): NSF

Slide 17:

Cerebrum (fragmented, freeze artifact): NSF

Slide 18:

Cerebellum (fragmented, freeze artifact): NSF

Slide 19:

Cerebellum and brainstem (fragmented, freeze artifact): NSF

Slide 20:

External umbilicus: NSF

Slide 21:

Eye: NSF

Final Diagnoses:

1. Mild, multifocal, suppurative interstitial pneumonia; Increased intra-alveolar amniotic squames; Mild, multifocal partial atelectasis
2. Mild, multifocal pulmonary nematodiasis (lungworm infection, Halocercus, presumptive)

Comments:

The most significant findings were interstitial pneumonia, evidence of fetal distress, and partial atelectasis.

Increased numbers of amniotic squames were noted in alveoli indicative of some level of fetal distress. Possibly this was due to difficult parturition, though other pre-parturient, intrauterine causes, including Brucella infection, should be considered.

While gross and histologic pulmonary findings indicated this animal breathed, there was multifocal partial atelectasis suggesting incomplete expansion of the lungs after birth and

coupled with the gross appearance of the umbilicus, it is likely this animal did not survive long after birth.

Given a short birth-death interval, pneumonia existed in some form and severity prior to parturition; the primary differential would be in utero Brucella infection and this animal should be evaluated via PCR and or culture if appropriate tissues are available.

Lungworm infection was already productive (larva-producing adults) which was somewhat unusual; in previous cases larva and adults not producing larva have been noted, but on the whole this underscores in utero transmission of Halocercus can occur, as has been described previously.

Reported By:

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May 21, 2013