Final Report

Date Submitted: 9/24/2008  Case Coordinator: Perry Habecker  Accession No: N0834321

MARINE MAMMAL STRANDING CENTER  Phone: (609)266-0538
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BRIGANTINE NJ 08203  Email: MMSC@VERIZON.NET

Associated Parties
Owner: Marine Mammal Stranding Center

Reference Data
NBC Case Identifier: Nx o.p.

Animal Information
Farm IDs:
[MMSC 08-132]

Taxonomy  Production Type  Sex  Age
Mammalian - Cetacea / whale, dolphin - Bottlenose dolphin  Female  Juvenile

Diagnosis
Death attributed to fungal pneumonia.

Comments
There is no evidence of trauma.

Pathologic Anatomic Findings

Lab Findings

Mammalian Pathology
General Results

A juvenile female dolphin, in good body condition and good postmortem condition, is examined. Blubber thickness is as follows: dorsal, 1.9 cm; lateral, 1.8 cm; ventral, 2.0 cm. Both pectoral fins and the flukes have a few brown cylindrical barnacles approximately 2cm in length and 5mm in diameter (Xenobalanus sp.) attached to the caudal skin surface. The central cornea of the right eye has a full thickness defect with smooth, thin edges. No lens is present.

The lungs are diffusely firm and rubbery. The right lobe is dark red with multiple subpleural, smooth, firm foci with irregular borders, which extend up to 4 mm into the adjacent parenchyma. Both lungs contain a moderate number of 2-8mm diameter firm, yellow, gritty to caseous, irregular foci, which tend to be concentrated toward the dorsal fields.

The glandular stomach contains numerous 5-7mm diameter smooth, brown, round to oblong parasites attached to the mucosal surface. The esophagus and squamous portion of the stomach contain several 4-15mm diameter depressions with irregular edges (ulcers) in the mucosa. No ingesta is present in the stomach. The intestine contains scant thick yellow fluid material throughout its length.

Histopathology

General Results

1&2) Lung [x6]: Bronchopneumonia, suppurative, severe, chronic, multifocal with intralobular calculi and fungal hyphae. There is marked scarring of the pulmonary parenchyma. Exudates within lumens of bronchioles are occasionally mineralized. The inflammatory exudate largely purulent, but many airways and alveoli are filled with foamy macrophages. Fungi hyphae are best visualized in peribronchiolar cartilage wherein the chondroid matrix is eosinophilic. Hyphal morphology consists of short, barrel-shaped segments that are bulbous when terminal.

3) Heart & pulmonary artery: No lesions observed (NLO).

4) Liver [x2]: Hepatocellular lipidosis, severe, diffuse.

5) Kidney & adrenal gland: NLO

6) Skin & spleen: NLO

Stomach, squamous compartment: Deep ulcer, with minimal inflammation, and serosal serous atrophy of adipose.

7) Stomach, glandular compartment: Multiple attached spheroidal helminths; Trematode morphology, probable Braunina cordiformis.

Mesenteric lymph node: NLO

8) Esophagus [x2]: Submucosal cyst with purulent contents. The cyst lining is a single layer of cuboidal epithelium.

9) Pituitary gland, bladder, ovary with oviduct: NLO

10-12) Intestine [x11]: NLO

13-15) Brain, survey sections: NLO

16) spinal cord [x4]: NLO

Microbiology

General Results

Aerobic culture of lung: Edwarsiella tarda and Enterobacter cloacae are recovered.
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**Preliminary Report**

**Date Submitted:** 10/9/2008  
**Collection Date:**  
**Case Coordinator:** Perry Habecker  
**Accession No:** N0836347

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**Associated Parties**  
**Owner:** Marine Mammal Stranding Center  
**Veterinarian:** Dr. ROBERT SCHOELKOPF  
**Vet Code:**

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**Reference Data**  
**NBC Case Identifier:** nx op

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**Animal Information**

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**Diagnosis**

OPEN—limited histology pending.

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**Comments**

Liver, kidney and gastric mucosa are saved frozen for potential toxicologic assay. There is no evidence that death was the result of trauma. Photos of the body are retained.

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**Lab Findings**

**Mammalian Pathology**

**General Results**

A nongravid juvenile female bottlenose dolphin is examined. Body weight is 53kg; blubber thickness (at a transverse level behind pectoral girdle) is 14mm, 15mm & 22mm, dorsally, laterally, and ventrally respectively. Postmortem condition is poor as indicated by peeling skin, swollen tongue and eyes and malodor. The brain and spinal cord are liquified. There are no gastrointestinal contents. Sparse 5mm diameter globoid trematodes are attached to the gastric glandular mucosa. The left lung is more severely congested than the right lung.