



DIVISION OF SURGICAL PATHOLOGY

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December 7, 1992

Graham Worthy, Ph.D
Texas Marine Mammal Stranding Network
4700 Avenue U
Galveston, Texas 77551

RE: Tursiops PA 292

Dear Dr. Worthy:

This will report to you my findings in the case of the Tursiops referenced above. My opinion is based on the gross autopsy examination and study of histologic slides prepared from the tissues. A summary of the gross autopsy findings is attached. A detailed description of the histopathology is available.

The major findings in this animal were in the chest cavity. There was a marked empyema in the right pleural space. This was caused by an object which I think is a bony spine from a dorsal fin of a fish, probably a catfish. This had penetrated the esophagus just above the diaphragm, and entered the pleural space. Actually, the tip was found sticking into the paraspinal muscles. I am not certain of my identification of the object, so I have enclosed two photographs for your use.

In addition to the empyema, there was another unrelated condition of the lungs. Both lungs showed a remarkable proliferation of vessels, mainly small blood vessels. This is a very unusual condition, recently reported in a stranded Tursiops in Florida under the name "lymphangiomyomatosis" by Rawson et al in the Journal of Wildlife Diseases, 28:323-325, 1992. They were unable to attribute it to any particular cause, although they speculated on a relationship to very low testosterone levels. Our animal has active sperm production.

Little else abnormal was found, except for a diffuse enlargement of lymph nodes.

I would attribute death in this animal to natural causes. There is no evidence of human interaction.

Sincerely,

A handwritten signature in cursive script, appearing to read "D. Cowan".

Daniel F. Cowan, M.D.
Professor of Pathology

Dolphin autopsy.

April 11 1992

PA 292 Tursiops truncatus 271 cm male.
Weight KG
Age 13.1 years (#GLG)

Animal was recovered dead. Code 2. from Gulf Beach, Mustang Island, Nueces County.

Internal examination: Right pleural space contains a large amount of fibrino-purulent material, and the lung is covered with a shaggy fibrin membrane, especially toward the base. A 53 mm long, 4 mm wide bony object with a serrated edge, apparently spine from the dorsal fin of a catfish has penetrated the esophagus just above the diaphragm. The tip of the spine is embedded in the chest wall, and the remainder is in the pleural space.

Tissue grossly identified as "thymus" fixed in Zn formalin. Slightly spongy texture. Second mass in the vicinity of the thymus looks like node with caseous necrosis. Mesenteric node for example, (MSLN) measures 4x2x7 cm.

A discoid mass with a central hole is found loose in the peritoneal space. (OBJ) Block INT identified as intestine near the stomach. the abdomen: Polypoid masses in the stomach (ST POL) are grossly Braunina.

Section of the brain sampled include the pineal region (no pineal identified), left and right, and the basal meninges.

General impression from the gross examination: Animal died of complications of perforation of the esophagus by a fish fin spine. Empyema. sepsis. Deemed to be an accident- natural causes.

PA292

