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## The University of Texas Medical Branch at Galveston



DEPARTMENT OF PATHOLOGY
DIVISION OF SURGICAL PATHOLOGY

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November 23, 1992

Graham Worthy, Ph.D Texas Marine Mammal Stranding Network 4700 Avenue U Galveston, Texas 77550

RE: Tursiops GA 457

Dear Dr. Worthy;

This will report to you my findings in the case of the <u>Tursiops</u> referenced above. My opinion is based mainly 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 two "tumors", one an adenocarcinoma of a hepatic lobar bile duct, and a second lesion that I am calling a reactive fibrous histiocytoma of the common bile duct. As best I can determine, the carcinoma has not been seen in a cetacean before, although several are reported from Pinnipeds. The latter lesion is very rare in man, and I have not been able to find one like it in the veterinary literature. It is so large as to nearly block the common bile duct. I assume that they are related because it would be too much of a coincidence for them to be unrelated. I suspect they result from parasitism, although I found no evidence of parasitic infestation at the time of examination.

There is a peculiar pattern of vascular proliferation in the lungs. A purely descriptive term would be "angiosis". It is too diffuse to appear as a neoplasm, and probably is a reactive process.

This animal was on the verge of obstructing the common bile duct, and may have beached for that reason. In any event, I can find no reason to suspect human interaction related to this stranding. I would class it as a "natural" event.

Sincerely.

Daniel F. Cowan, M.D.

Professor of Pathology

GA 457 Tursiops truncatus female 218 cm, 120.7 Kg body weight Collected 17 April 1992, Galveston, 35th and Seawall.

This animal was found as a code 2, but by the time we could get to it, it had advanced to a code 3. The cooler was out of order and it was packed in ice over night. Major findings: A tumor in the common bile duct at the level at which the portal vein breaks up into the intrahepatic branches. The tumor measured 22 mm transverse diam, 24 deep and 42 long. It was attached to the bile duct wall by a narrow pedicle about 5 mm wide. The tumor was solid, white, slightly variegated, stained on the surface. Grossly, most consistent with a leiomyoma.

In the liver was another mass, about 1 cm diameter, clearly associated with a lobar branch of the biliary system. In gross, not clear whether this is a scar (granuloma) or a fibrous neoplasm.

Sampling was limited owing to the advanced state of the animal.