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GA 466

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GA 466 was a 244 cm long female *Tursiops* identified about 4:30 pm, Friday June 26, 1992 at Surfside Beach. It was collected at about 9:00 pm, and in the lab by 11:00 pm. It was in very good external condition, and was rated an early code 2.

The dorsal fin had two deep old healed vertical cuts that looked as if they could have been made by propeller blades. The fin was very distorted because the cuts were very deep and the wound did not heal with good alignment. The animal was sleek and looked as if there had been no weight loss. There were no skin lesions. The only external mark apart from a few scars, was a new 3 cm "stab" in the anterior chest, between the flippers. (This proved to be immediately over the region of the heart).

The right chest cavity was full of blood (massive hemothorax). The clot was about the size of the liver, with additional fluid blood. The pericardial sac had a 1 cm hole, and was filled with clotted blood. The epicardium was thick, white, shaggy and opaque, as from old chronic or healed pericarditis. The pleura was also thick and opaque, but smooth.

This animal's findings were most unusual. She had old, pre-existing disease, on which was superimposed the trauma that produced the chest wound and hemorrhage. The hemorrhage was enough to cause death. The wound missed the heart, but cut an artery of the chest wall, which bled slowly enough to allow the animal to beach before dying. In the complete absence of any other wound,

including the lack of scratches around the stab, given the location on the ventral aspect of the animal and the triangular shape of the wound track, the most likely cause was a stingray. This is consistent with both the behavior of the dolphin and the sting ray. If the wound were to have been caused by some human, I would have expected injuries on the dorsum of the dolphin, and probably more than one.

In addition to the wound, this animal had several chronic diseases. There was a very striking villous pericarditis, of some duration (months to years). The cause is not evident. Pericarditis can be caused by bacteria and by viruses, as well as non-infectious chronic diseases. Also, this animal has amyloidosis of the kidneys, lungs and salivary gland. In this disease, a protein from the blood gradually accumulates in the tissues of particular organs. While amyloidosis can be fatal if far advanced, it was no worse than moderate in this instance. The only other case in a dolphin of which I am aware was in a stranded *Tursiops* (GA 406) from about a year ago. She also has three tumors; one a gingival papilloma, a small fibrous tumor of the gum, and two kidney tumors which appear to me to be malignant, although small. Most authorities now agree that all tumors of the type found in this dolphin are malignant, even though the microscopic appearance is bland.