

Colorado Veterinary Diagnostic Laboratory
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DL#: 990-31691

Date: 2/1/00

Vet/Clinic: George Balazs/NOAA
Owner: NOAA
Animal ID: H915 Date Specimen Taken: NA
Species: C. mydas Breed: NA Age: Adult Sex: NA

History: This is an adult green turtle #H915 which has a large single tumor in the left eye. The tumor has progressed rapidly over the last year. The tumor is approximately 5 to 6 cm by 5 cm. Much of the tumor is relatively solid and it appears to have surrounded the eyeball. There are some black hues throughout this tumor.

DIAGNOSIS: Fibroma, eye, green turtle.

REMARKS: This tumor is somewhat difficult to classify histologically because of the small degree of epithelium (epidermis) on these sections. The primary lesions of the dermis are identical to what one sees with the fibropapillomas of green sea turtles, however, one small area of epithelium is not typical of what is seen with the fibropapilloma. Therefore, in regard to the history of having only one single tumor and the lack of the epithelial component of this tumor, this tumor could be classified as a fibroma or perhaps an extremely low grade fibrosarcoma as is observed in the jaw of green sea turtles. The etiology of this ocular tumor is probably the same as the other types of tumors but the manifestation in this particular turtle appears to be a little different. I would like to repeat that the diagnosis being a fibroma or an extremely low grade fibrosarcoma, similar to what is seen in the jaw, is based on the history of having only one tumor on the whole body that grew relatively rapidly and the fact that the epithelial component of the tumor was not observed in these sections of tumor.

HISTOPATHOLOGY: Four sections of tumor are examined, one including the eye. There is very little epithelium to examine in these four sections, however, what epithelium is present is characterized by being relatively thin but shows no evidence of pseudoepitheliomatous hyperplasia or other features typical of a fibropapilloma. All four sections of tissue contain tumor. The tumor is composed of neoplastic mesothelial cells forming wide interweaving bundles. There are a few parasitic ova surrounded by granulomatous reaction within at least two of the slides. The majority of the vessels

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throughout these sections of tumor are not surrounded by lymphocytes, however, there are a few small focal areas of inflammation within at least two slides. This inflammation is characterized by extremely small number of lymphocytes in small aggregates and a few of them are in the adventitia of vessels. The tumor is composed of large interweaving bundles of fusiform cells typical of the mesenchymal portion of the fibropapilloma of green turtles. A section of eye is examined. There is no evidence that the tumor has invaded into the globe of the eye, however, the tumor has caused such compression of the eye that the majority of the internal structures, including the lens and the retina have been totally destroyed.

Terry R. Spraker, DVM/PhD

Faxed: 2/11/00 ea

Typed: 2/11/00 ea

From: Robert Morris
To: tspraker@vth1.vth.colostate.edu
Sent: Thursday, February 17, 2000 11:34 AM
Subject: Eye histo report

Aloha Terry:

I read your histology report for the green turtle eye George sent. This was of interest since I removed the eye and the turtle was later released. The skin or orbit did not seem to be invaded and appeared normal. I removed the eyeball with tumor, trimmed the lid margins and sutured the lid margins closed. The tumor seemed to be on and covering the entire eyeball. Most of the eye tumors start on the conjunctiva and sometimes invade the cornea. I hope that this may be of some help.

Is the jaw fibrosarcoma paper been published yet?? This should probably be reported soon as I see these lesions on a weekly basis. I have enclosed a photo of one I recently removed.

Missing
GHB