Association of a Unique Chelonid Herpesvirus with Sea Turtle Fibropapillomas

Paul A. Klein

Pathology, Immunology and Laboratory Medicine, Box 100275, University of Florida, Gainesville, Florida 32611-0275, U.S.A. (E-mail: paklein@college.med.ufl.edu)

Researchers at the University of Florida (UF), Gainesville, and the Turtle Hospital, Marathon, Florida, have previously demonstrated, via transmission studies, that green turtle fibropapillomatosis (GTFP) is caused by an infectious subcellular agent, most likely an enveloped virus. However no virus has yet been isolated from tumours and shown to be the aetiologic agent. In 1996, the UF team reported discovery of a novel herpesvirus in GTFP using a PCR test (Herbst et al. in press). Using the PCR test, the team now has accumulated evidence that this herpesvirus is demonstrably present in more than 95% of the fibropapillomas (FP's) of green and loggerhead sea turtles in Florida, as well as in fibropapillomas of green turtles in Hawaii.

The FP-associated virus is genetically similar to human herpes simplex virus 1 and 2 and varicella zoster virus. Although most animals may harbour all kinds of viruses in our body at any one time, most of these viruses are harmless. Some animals may harbour viruses in tumours that are irrelevant; this has been shown in other diseases. Is this virus the cause of the disease or just growing in the tumour? Research groups at UF, the Retrovirology Research Laboratory at the University of Hawaii and the National Wildlife Disease Laboratory in Madison, Wisconsin, are working to isolate the virus so it can be tested in transmission studies.

These new developments at the UF, including the first documentation of the occurrence of a virtually identical herpesvirus in the fibropapillomas of loggerhead turtles are to be presented at the International Symposium on Sea Turtle Biology in Mazatlan, Mexico in March (Lackovich et al. in prep.).

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ANNOUNCEMENTS

Sea Turtle Postage Stamps of the World.

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An Unusual Stranding of a Leatherback Turtle in Turkey

Ertan Taskavak¹, Ralf H. Boulon Jr. ², and Mehmet K. Atatur³

¹Ege University, Faculty of Fisheries, Department of Fisheries, 35100-Bornova, Izmir, Turkey

²Division of Fish and Wildlife, Department of Planning and Natural Resources, 6291 Estate Nazareth 101, St. Thomas,

U.S. Virgin Islands 00802-1104 (E-mail:aggregate@virgin.usvi.net)

²Ege University, Faculty of Science, Department of Hydrobiology, 35100-Bornova, Izmir, Turkey

On the 5th of October 1997, a leatherback turtle (Dermochelys coriacea) was found entangled in gill nets set in 10-13 m of water in Edremit Bay, Balikesir, Turkey (39°30°12"N, 26°54'36"E). The turtle was dead upon discovery and carried no external tags (equipment was not available to check for the presence of PIT tags). The turtle was weighed by the fisherman, using an uncalibrated market scale, as approximately 200 kg.

The carapace was measured from notch to tip at 136 cm (curved) and 129 cm (straight) length. Carapace width at the widest point was 100 cm (curved) and 77 cm (straight). Plastron length and width were 103.5 cm and 74 cm, respectively. Head width and length were 20 cm and 24 cm, respectively. Tail length was measured at 12 cm from apex to cloaca.

The turtle was identified as a male after examination of the urogenital opening revealed the presence of a penis. The turtle was examined for ectobiota of which none were found. The animal was not subject to necropsy as the community where it was found wished to maintain it as a tourist attraction.

From the carapace length and weight, this turtle was most likely to have been a large subadult since the male secondary sexual characteristic of increased tail length had not yet developed. Data regarding the sizes of male leatherback turtles are scant, however minimum nesting size for females is given as 130 cm (Zug & Parham 1996) and the smallest of nesting females weighed at Sandy Point National Wildlife Refuge, St. Croix (U. S. Virgin Islands) (n=134) was 259 kg (Boulon et al. 1996).

A cursory review of the literature revealed no previous reports of leatherback turtles for the Aegean coast of Turkey, either nesting or observed in coastal waters. Geldiay et al. (1981) reported the presence of a small number of leatherback turtles in Turkey, but only from the Mediterranean (south) and not the Aegean (west) coast. Similarly, only green and loggerhead turtles nest in Turkey, mainly along the Mediterranean shores (see Baran & Kasparek 1989 for overview).

Groombridge (1990) suggests that turtles may enter the Mediterranean regularly and possibly in substantial numbers. He states that leatherback turtles have been widely and not infrequently recorded in the central and western Mediterranean. However, this appears to be the first report of a leatherback turtle from the coastal waters of the Aegean coast of Turkey in recent times,

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