HEPATOSPLENIC IMMUNOBLASTIC LYMPHOMA IN A BOTTLENOSE DOLPHIN (*TURSIOPS TRUNCATUS*)

P. Herráez¹, A. Fernández¹, J. Pérez², A. Espinosa de los Monteros¹, M. Arbelo¹, T. Fernández¹, F. Guisado and J. R. Jaber¹

¹Departamento de Morfología, Facultad de Veterinaria de Las Palmas de Gran Canaria.Trasmontaña s/n. Arucas. 35416. Canary Islands. Spain.

²Departamento de Anatomía y Anatomía Patológica Comparadas, Facultad de Veterinaria de Córdoba. Spain

The gross, histopathological, immunohistochemical and ultrastructure features of an immunoblastic lymphoma are described in a bottlenose dolphin (*Tursiops truncatus*) found stranded alive in the coast of Gran Canaria (Canary Island, Spain). The spleen and liver were moderately enlarged because of diffuse infiltration of round neoplastic cells in splenic cords and sinuses and in hepatic sinusoids, but they were not found in other organs. Tumour cells showed scant lightly eosinophilic or basophilic cytoplasm with distinct cell boundaries and hyperchromatic nucleous with one or more nucleoli. Mitoses were common. The immunophenotype of tumour cells was IgG+ and CD3-. The ultrastructural examination revealed features of malignancy among these cells. Based on the histopathological, immunohistochemical and ultrastructural features the tumour was classified as an immunoblastic lymphoma. A possible association with high levels of polychlorinated biphenyls (PCBs) is discussed.

IMMUNOHISTOCHEMICAL CHARACTERISATION OF THE INFLAMMATORY INFILTRATE OF HEPATIC LESIONS AND LYMPH NODES OF STRIPED DOLPHINS

J. R. Jaber¹, J. Pérez², M. Arbelo¹, P. Herráez¹, A. Espinosa de los Monteros¹, F. Guisado¹, T. Fernández¹ and A. Fernández¹

¹Departamento de Morfología, Facultad de Veterinaria de Las Palmas de Gran Canaria. Trasmontaña s/n. Arucas, 35416. Canary Islands. Spain

²Departamento de Anatomía y Anatomía Patológica Comparadas, Facultad de Veterinaria de Córdoba, Spain

This study describes the immunophenotype of the inflammatory infiltrate associated to hepatic lesions observed in 10 striped dolphins (*Stenella coeruleoalba*). The distribution of T lymphocytes (CD3), plasma cells producing IgG, macrophages, MHC class II antigen and S-100 protein was analyzed both in hepatic lesions and lymph nodes. Non specific chronic reactive hepatitis was identified in 8 dolphins, whereas chronic parasitic cholangitis with lymphoid proliferation and portal-portal bridging fibrosis was observed in two other dolphins. Non specific chronic reactive hepatitis showed variable numbers of CD3+ T cells in portal spaces and hepatic sinusoids. The majority of plasma cells observed in portal areas and in less degree in hepatic sinusoids expressed IgG+. Some macrophages located in portal areas, as well as Kupffer cells, and circulating monocytes were lysozyme+. Lymphonodular aggregates observed in chronic parasitic cholangitis showed a cellular distribution similar to that found in lymph nodes. Thus, lymphoid follicles showed a sparse number of CD3+ T lymphocytes, however, interfollicular tissue areas were composed mainly of CD3+ T lymphocytes. Stellate cells similar to follicular dendritic and interdigitating cells expressing S-100 protein and MHC class II antigen were found in lymphonodular aggregates, suggesting that those inflammatory infiltrates are highly organised to enhance antigen presentation to B and T cells.