



Some histological and histochemical characteristics of one species of bottlenose dolphin (*Tursiops* sp.) from the Adriatic Sea

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One dolphin, caught in a tunny net in the Adriatic Sea, from the genus of bottlenose dolphins (*Tursiops* sp.) was studied. The animal was similar to the Atlantic bottlenose dolphin (*Tursiops truncatus*), but there were essential differences between them. It was a juvenile female; 265 cm long and weighed 204 kg.

Histological and histochemical investigations were carried out on the ovaries, kidneys, liver and some groups of muscles (pectoral, abdominal, lumbar and diaphragm). Sections of these tissues were stained by haematoxylin and eosin. Reactions for the localization of the activity of oxidative enzymes (alfa-GP-DH, G1-DH, L-DH, S-DH, DPN-D, TPN-D), and ATPase were determined.

In the ovary several Graafian follicles at different stages of development were found. The structure of the investigated ovary was the same as that of other juvenile mammal species. The liver was composed of small hepatocytes, each with a round nucleus with peripherally located heterochromatin. Activity of oxidative enzymes in hepatocytes was granular and diffuse but was uniformly spread throughout lobules. The microscopic structure of the kidney was the same as in other mammals, but there were thick layers of connective tissue between the renules. The activities of enzymes in epithelial cells were stronger in proximal tubules than in distal tubules. Two types of fibres were found in the muscles. The diameter of white fibres was larger and showed a weak granular reaction compared to the dark fibres which were smaller in diameter and showed a stronger granular reaction to oxidative enzymes. The proportion of white and dark fibres was approximately equal. In the diaphragm both types of fibres showed a somewhat smaller diameter.