

MACRO AND MICROSCOPIC ANATOMY OF THE ESOPHAGUS OF THE GREEN TURTLE

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Knowledge on the anatomy of the esophagus is an important issue that enables the understanding of the digestive process of possible diseases that can affect this organ in marine turtles. This study aims to describe aspects related to gross anatomy and histology of the green turtle (*Chelonia mydas*) esophagus. Ten animals that were found dead by researcher of Projeto Tamar (the Brazilian Sea Turtle Conservation Programme) in the State, Rio Grande do Norte north-eastern Brazil, composed the sample of this study. After the opening of the plastrons, the digestive organs were withdrawn. Fragments of the cranial and caudal portions of the esophagus were fixed on 10% of formaldeid solution for 24 h. After this, they were dehydrated in increased ethanol concentration and were diafanized in xylol included in paraffin according to conventional histological methods. The esophagus of the *C. mydas* is presented as a tubular muscular-membranous organ. The mucous of the esophagus is plaited and has point corneal papillae. These inclined in the caudal direction and increase in size until it reaches the medium esophageal area and decrease in the caudal region. In Histological terms, the mucous presented itself with keratinized and stratified squamous epitheliums, with its aglandular propria lamina that was composed by loose conjunctive tissue (LCT). The muscular layer of the mucous and submuscular was not evidenced. The muscular layer is composed by striated muscles organized in parallel beams in a unique layer; they are in a longitudinal manner and present abundant loose conjunctive tissue between the beams. The external layer presented itself advanced in the cranial portion and serose in the caudal portion. The esophageal papillae followed the same microscopic structure of the esophageal mucous. However, in their propria lamina the infiltrated linfocites could be visualized as well as adipous tissue, lymphatic and blood vessels. The esophageal papillae facilitate deglutition and avoid food reflux. The absence of glands in the mucous of the esophagus indicated that this organ has a mechanical function only. The presence of queratine protects the esophageal mucous against attrition that occurs once food goes through esophagus.

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