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Gross Morphological Study on Heart of Yellow Bellied Sea Snake

Authors : Jonnalagadda Naveen, M. P. S. Tomar, Putluru Satish, Palanisamy Dharani

Abstract : Present investigation was carried out on a single specimen of the heart of yellow-bellied sea snake, which accidentally came to the seashore with the fisherman's net. After the death, these specimens was preserved in 10% neutral buffered formalin and observe for its morphology. The literature cited revealed that meager information was available on the anatomy of the heart of this species of snake thus present study was planned on the gross anatomy of the heart of yellow-bellied sea snake. The heart of yellow-bellied sea snake was located between 28-35th rib in an oblique direction in the pericardial sac. It was three chambered with the complete division of atria but the ventricular cavity was incompletely divided. The apex did not show any gubernaculum cordis. The sinus venosus was the common cavity for confluence of anterior and posterior vana cava and the jugular vein was opened with anterior vena cava. The opening of posterior vena cava was slit-like and it was guarded by membranous valves whereas no valve could be observed at the opening of anterior vana cava and the jugular vein. Both the caval veins ran along the right border of the heart. Pulmonary vein was single which later divided into two branches. The length-width index for the atria was 1.33 whereas it was 1.67 for the ventricle. The atrioventricular canal was situated slightly towards the left of the midline of the heart and was divided into a right cavum pulmonale and left cavum arteriosum of which the right one was slightly larger and longer than the left. The cavum venosum was present in between the cavum pulmonale and the cavum arteriosum. The Ventricle was elongated triangle muscular compartment with ventrally located apex. Internally the cavity of ventricle was divided into two partial chambers dorsally by a muscular ridge and ventrally by an incomplete inter ventricular septum.

Keywords : aorta, atrium, heart, sea snake, sinus venosus, ventricle
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