Abstract

The aim of this work is to study the morphological characteristics of the trachea of Saimiri sciureus through quantification and measurement of the cartilaginous rings, providing information to facilitate the election of more appropriate endotracheal tube, laryngeal mask or tracheostomy tube for anesthetic and emergency procedures, as it is a species of Neotropical primates most commonly used as biological models, and little is known about their morphology. Nine animals were investigated, being 4 adults and 5 young acquired from the Centro Nacional de Primatas (National Primate Center - CENP) - Ananindeua - PA, which died from natural causes and then fixed in aqueous buffered formalin 10%. Saimiri sciureus trachea comprises an average of 32.8 incomplete rings and an average length of 3.74 cm in young animals, while in adults it demonstrated an average of 30.25 rings and average length of 3.67 cm. The shape of the light and its proportion varied along the trachea. Endotracheal tube with a diameter the 2.0 - 2.5mm, laryngeal mask number 1.0 or tracheostomy tube neonatal Shiley number 3.0, can be placed in animals weighing 600g - 1.2 Kg. Given the great importance of the species studied, which is widely used as a biological model, the detailing on the morphology and morphometry of tracheal animal studies provides new approaches needed in respiratory emergency, as well as, facilitates the development of future anesthetic protocols.

Keywords

Emergency procedure, morphology, respiratory system, Saimiri sciureus, trachea.