

Gross and Histological Studies on the Thymus of the Grasscutter (Thyonomys swinderianus)

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Abstract : Twelve apparently healthy grasscutters between the ages of three and seven months were used for this study. The animals were purchased from local breeders in Oturkpo, Benue state, Nigeria and transported to the research laboratory in the Department of Veterinary Anatomy, Ahmadu Bello University, Zaria by means of constructed cages. The animals were divided into three groups according to their ages and acclimatised. Sacrifice was done using chloroform gaseous inhalation anaesthesia. An incision was made at the neck region and the thymus located and identified by its prominent bilateral nature. Extirpated thymuses from each animal were immediately weighed and fixed in Bouin's fluid for 48 hours. The tissues were then prepared using standard methods. Haematoxylin and eosin was used for routine histology and Rhodamine B aniline methylene blue was for studying the architecture of the elastic and reticular fibres of the thymus. Grossly, the thymus appeared as a bilateral organ on either side of the thoracic midline. The organ size decreased consistently as the animals advanced in age. Mean \pm SEM values for thymic weights were 1.23 ± 0.048 g, 0.53 ± 0.019 g and 0.30 ± 0.042 g at three, five and seven months of age respectively.

Keywords : gross, histological, thymus, grasscutter

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