

Anatomical Studies on the Spleen and Mesenteric Lymph Node of the Grasscutter

Authors : R. M. Korzerzer, J. O. Hambolu, S. O. Salami, S. B. Oladele

Abstract : The grasscutter (*Thryonomys swinderianus*) has become an important source of protein and income to rural dwellers in most West African countries including Nigeria. Twelve apparently healthy grasscutters consisting of six males and six females between the ages of three and seven months were obtained from rural dwellers in Benue state and used for this study. The animals were transported by means of constructed cages to the Department of Veterinary Anatomy, Ahmadu Bello University, Zaria and sacrificed using chloroform inhalation gaseous anaesthesia by suffocation. The spleen and mesenteric lymph nodes were extirpated and the tissues prepared using standard methods, haematoxylin and eosin stain was used for routine histology, while Rhodamine B-aniline-methylene blue stain was used for staining reticular and elastic fibres. The spleen was dark red in colour and roughly triangular in outline, and was observed to increase consistently with age, maximum values were recorded at seven months of age in both males and females. Mean \pm SEM values for splenic weights were 0.67 ± 0.09 g, 1.65 ± 0.35 g and 2.31 ± 0.06 g at three, five and seven months of age, respectively. The percentage ratio of splenic weight to body weight was 0.1%. Histologically, the germinal centres revealed three zones; the germinal centre, cortical layer and the marginal zone. The mesenteric lymph nodes were constantly bean shaped and appeared as opaque white masses which resemble fat but were distinguished from fat by their pearly glossy nature. The mean \pm SEM values for mesenteric lymph node weights were 0.056 ± 0.005 g, 0.143 ± 0.034 g and 0.1600 ± 0.023 g at three, five and seven months of age, respectively.

Keywords : anatomical, spleen, mesenteric lymph node, grasscutter

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