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**Morphology and distribution of the thoracic spinal nerves in the African giant rat
(*Cricetomys gambianus*)**

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This study was carried out to provide detailed description of the morphology of the thoracic spinal nerves and their distribution to the skeletal muscles of the AGR. Six (6) adult rats of both sexes were euthanized using halothane inhalant anesthetic by the application of the open – drop method. The rats were fixed in 10% formalin and skin and muscles were dissected and the vertebral column was opened by laminectomy and removal of osseous pedicle enclosing the spinal cord using a bone cutter and rongeur. The AGR has 12 thoracic spinal nerves. The dorsal primary branches of the thoracic spinal nerves divided into medial and lateral branches. The medial branches supplied branches to the thoracic erector spinae muscles while the lateral branches supplied several layers of muscles on the dorsolateral aspect of the thorax and reached the skin subcutaneously as the lateral cutaneous nerves. The ventral primary branches of the thoracic (intercostal) nerves passed distally along the caudal border of the ribs covered medially by pleura. Each intercostal nerve detached muscular branches and a cutaneous branch which supplied branches to the muscles of the lateral thoracic wall. The lateral branch detached about the middle of the lateral thoracic wall divided into the middle muscular branch and the lateral cutaneous branches. The former supplied fibers to the thoracic part of the abdominal muscles and the latter supplied the superficial fascia on the ventrolateral aspect of the thorax and the cutaneous trunci. The cranial series of intercostal nerves at their distal ends supplied fibers to the transverse and rectus thoracis. The distal ends of the caudal series formed a trunk that terminated in the cranial part of the rectus abdominis. The thoracic spinal nerves are distributed to the muscles of the trunk of the AGR.

Biography

S M Maidawa is lecturer of Veterinary Anatomy at the Faculty of Veterinary Medicine, Ahmadu Bello University, Zaria, Nigeria. He has taught Anatomy since 2005 and is actively involved in research.

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