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## Morphology and histomorphometry of the aorta and its branches in grass-cutter (*Thyronomys swinderianus*)

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The morphology and histomorphometry of the aorta and its branches in Grass cutter were studied using gross and light microscopic methods. The grass cutters were obtained from Demaco Farms in Akor-Nike in Enugu State, Nigeria and brought to the Department of Veterinary Anatomy, University of Nigeria, Nsukka for anatomic studies. They were humanely sacrificed, carefully dissected and patterns of arteries that originated from their aortic arch and descending aorta were examined. Segments of the aorta and its major branches were fixed in Bouin's fluid and routinely processed for histology. The brachiocephalic trunk and left subclavian artery originated separately from the aortic arch. The brachiocephalic trunk gave off right subclavian and continued as a common trunk for the right and left common carotid arteries. Bronchoesophageal and dorsal intercostal arteries originated from the thoracic aorta. The abdominal aorta gave off the celiac, cranial and caudal mesenteric, renal, lumbar arteries and terminated into paired external and internal iliac and median sacral arteries. Microscopically, the aorta and its branches were elastic type of arteries though celiac and external iliac had characteristic features of both elastic and muscular arteries. The mean wall thickness and luminal diameter were 580.38±2.07, 3442.78±68.05; 376.64±4.06, 3026.18±82.89 and 334.74±8.17, 2663.38±55.85µm for aortic arch, thoracic and abdominal aortae, respectively. The mean wall thickness and luminal diameter were 388.94±2.00, 2236.72±55.15; 236.16±30.00, 1598.68±95.22; 294.36±7.78, 1507.90±239.95 and 235.78±22.74, 1391.54±251.61µm for brachiocephalic trunk, left subclavian, celiac and external iliac arteries, respectively.

## **Biography**

Innocent Chima Nwaogu obtained his DVM degree from the Kishinev Agricultural Institute USSR, MSc and PhD from the University of Nigeria, Nsukka. He is a fellow of the College of Veterinary Surgeons, Nigeria. He is currently the Head, Department of Veterinary Anatomy, University of Nigeria, Nsukka. He has published several scientific articles in peers review local and international journals. He is a member of Nigeria Veterinary Medical Association, Anatomical Society of Nigeria and Editorial Board Member, Nigerian Veterinary Journal (NVJ).

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