

Position and Blood Supply of the Carotid Body in a Kenyan Population

Abstract:

Position and source of blood supply to the human carotid body displays population variations. These data are important during surgical procedures and diagnostic imaging in the neck but are only scarcely reported and altogether missing for the Kenyan population. The aim of this study was to describe the position and blood supply of the carotid body in a Kenyan population. A descriptive cross-sectional study at the Department of Human Anatomy, University of Nairobi, was designed. 136 common carotid arteries and their bifurcations were exposed by gross dissection. The carotid body was identified as a small oval structure embedded in the blood vessel adventitia. Position and source of blood supply were photographed. Data are presented by tables and macrographs. 138 carotid bodies were identified. Commonest position was carotid bifurcation (75.4%) followed by external carotid artery (10.2%), internal carotid artery (7.2%) and ascending pharyngeal artery (7.2%). Sources of arterial blood supply included the carotid bifurcation (51.4%), ascending pharyngeal (21.0%), external carotid (17.4%) and internal carotid (10.2%) arteries. Position and blood supply of the carotid body in the Kenyan population displays a different profile of variations from those described in other populations. Neck surgeons should be aware of these to avoid inadvertent injury