

## **Descriptive study on bifurcation of the brachial artery**

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Variations of the brachial artery are the 3<sup>rd</sup> commonest out of upper limb arterial variations. Information about brachial artery bifurcation is important during surgical procedures and imaging of the upper limb. A study was conducted on 54 upper limbs of 27 cadavers (16 male and 11 female cadavers) during routine dissection at the department of Anatomy, Faculty of Medicine, Peradeniya. The anterior compartment of the arm, cubital fossa and the forearm were dissected and the pathway, branches and the distribution of the brachial artery were documented. In 51 (94.4%) of cases, the brachial artery divided into radial and ulnar arteries at the level of the neck of the radius. Unilateral high bifurcation of brachial artery was noted in two (3.7%) cases on the left side. In one of these, bifurcation was directly from the axillary artery at the axilla just proximal to the formation of the median nerve. Here the brachial artery divided into its terminal radial and ulnar branches. In the other specimen, the brachial artery bifurcation into radial and ulnar arteries, was found at the level of the mid humerus. Unilateral trifurcation of the brachial artery was also noted in one (1.8%) specimen. Here the brachial artery was seen to trifurcate into radial, ulnar and common interosseus arteries at the level of the neck of the radius. Commonest site of bifurcation of the brachial artery is at the level of neck of the radius. According to the literature, the brachial artery bifurcates at this level 85%-97% of the time. High bifurcation and trifurcation of the brachial artery was also noted. Reporting of arterial distribution in different populations is important for the practicing clinician during diagnostic and surgical procedures.

**Key words:** variations, brachial, radial, ulnar, artery