

Complex Neurovascular Variation in One Upper Limb

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Key words: superficial brachial artery, median artery, princeps pollicis artery, radialis indicis artery, radial artery, median nerve

SUMMARY

Variations in the arterial pattern of the upper limb are frequently encountered during dissection of the human body. However, multiple variations in one limb are infrequently encountered. Dissection of the left amputated upper limb, 15 cm above the intercondyler line, of a female cadaver revealed the following variations.

1. The superficial brachial artery descends behind the bicipital aponeurosis and continues as the radial artery.
2. The deep (definitive) brachial artery continues in the forearm as the ulnar artery under the superficial flexor muscles of the forearm.
3. The median artery arises from the ulnar artery 5 cm below the intercondyler line and continues deep to the flexor retinaculum.
4. The median artery terminates in the hand as princeps pollicis and radialis indicis arteries.
5. The median nerve forms a loop surrounding the median artery 4 cm below the intercondyler line and bifurcates 2 cm above the flexor retinaculum.

INTRODUCTION

Variation of the principal arteries of the upper limb has received a lot of attention by anatomists and surgeons as well. Different and confusing terminologies were used to describe these variations (Rodríguez-Niedenführ et al., 2001). Some of these variations include: persistent median artery (Henneberg, 1992); superficial brachial artery continuing as common interosseous artery (Nakatani et al., 1997); superficial ulnar artery (McWilliams and Sodha, 2000); duplication of the radial artery (Bum-