

INNERVATION OF THE LONG HEAD OF TRICEPS BRACHII BY AXILLARY NERVE: A CASE REPORT

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The anatomy of the innervation of upper limb is complex and challenging. Thus it has been the subject of many studies. Awareness of the anatomical variations of innervation pattern is important from a clinical standpoint and is of academic interest. Standard anatomical books state that the axillary nerve originates from the posterior cord of the brachial plexus and gives motor innervation to deltoid and teres minor and carry sensation from the skin over lower half of deltoid muscle. The radial nerve is the continuation of the posterior cord and supplies all three heads of the triceps muscle. During routine dissection for undergraduate teaching in the Department of Anatomy, Faculty of Medicine, University of Jaffna, it was observed in a cadaver that the motor branch to the long head of triceps was given off by the posterior branch of the axillary nerve, after reaching the posterior aspect of the shoulder through the quadrangular space. Radial nerve innervated lateral and medial heads of triceps. In literature, few studies have been done on variations in the branching pattern, and distribution of the axillary nerve and some studies highlighted the supply of long head of triceps by the axillary nerve. The axillary nerve may get injured in dislocation of the shoulder joint, fracture of surgical neck of humerus and brachial plexus injuries like Erb's palsy. This variation will help interpret possible weakness of the triceps muscle in these cases. This variation should be born in mind while utilizing the long head of triceps to restore motor function of deltoid muscle in patients with upper root injury. Awareness of such variation is important for surgeons, orthopaedicians and anaesthetists for surgical treatment of traumatic nerve injuries, management of shoulder repairs and nerve transplant procedures.

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