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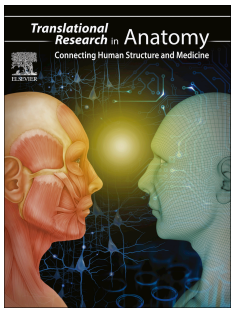

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Communication between Median and Musculocutaneous nerve at the level of cubital fossa - a case report

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Abstract

The anatomical variations of the brachial plexus are important to be reported, in order to avoid their damage during the upper-limb surgical procedures. Despite of the frequent documented abnormalities in the pathway of the musculocutaneous and the median nerves, the anatomical variation accurately described in the present case is unusual to see: it does not perfectly come under any of the classifications proposed in literature. During the dissection of the right brachial plexus in an old male Caucasian cadaver a communicating branch between the musculocutaneous nerve and the median nerve was observed. Proximally It originated by the musculocutaneous nerve, after its perforation of the coracobrachialis muscle; distally it joined the median nerve only at the level of the cubital fossa. The musculocutaneous nerve and the median nerve maintained their normal courses, supplying all the collateral and terminal branches. In the same limb an atrophied short head of the biceps brachii muscle was also seen.

Keywords: *median nerve, musculocutaneous nerve, communicating branch, brachial plexus, variation.*

1) Introduction

The brachial plexus is formed by the anterior rami of the lower four cervical nerves and the first thoracic one (C5-T1). They arrange the medial, the lateral and the posterior cords, respectively related with the second part of the axillary artery. The cords give rise to the terminal branches at the level of the axilla base, which supply the innervation of upper limb. The musculocutaneous nerve (C5-C7) directly emerges from the lateral cord, while the median nerve (C5-T1) is given by the union of the lateral and the medial contributions, which respectively arise from the lateral and the medial cords. The musculocutaneous nerve supplies branches for the muscles of the anterior compartment of the arm and it gives rise to the lateral cutaneous nerve of the forearm, for the sensory innervation. The median nerve innervates the major part of the flexor muscles in the anterior compartment of the forearm and those in the lateral part of the hand; it gives rise to the palmar cutaneous and the