

A CADAVERIC REPORT ON FORMATION OF MEDIAN NERVE AT UPPER PART OF ARM

Anatomy

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ABSTRACT

Objectives: To study the anatomical variations of the formation of the median nerve. **Methods:** 24yr embalmed adult male cadaver was used for this study. They were carefully dissected and examined to detect any anatomical variations of the formation of the median nerve. **Results:** bilateral variation in the median nerve formation was detected in this study. The median nerve was formed at a lower level than normal in both upper limbs. **Conclusion:** The knowledge of the abnormal level of formation of the branches mentioned in this study has a clinical importance. The injury of these branches may give rise to unusual clinical symptoms. The presence of these branches must be kept in mind during the performance of surgery to avoid their injury.

KEYWORDS

MEDIAN NERVE, BRACHIAL PLEXUS, ARM, BRACHIAL ARTERY

INTRODUCTION

The median nerve is formed in the axilla by the union of lateral and medial roots^{1,2}.

The medial root originates from the medial cord of the brachial plexus. The lateral cord of the brachial plexus divides into the lateral root of the median nerve and the musculocutaneous nerve^{1,2}.

The knowledge of the anatomical variations of the peripheral nerves in the upper limbs is important as these abnormal nerves could be injured during surgical procedures. It can also explain unusual clinical symptoms. The aim of this investigation is to study the anatomical variations of median nerve formation.

METHODS

The upper limbs obtained from 24 year embalmed adult male cadavers were utilized in this study. They were carefully dissected and examined for any anatomical variations of median nerve formation.

RESULTS

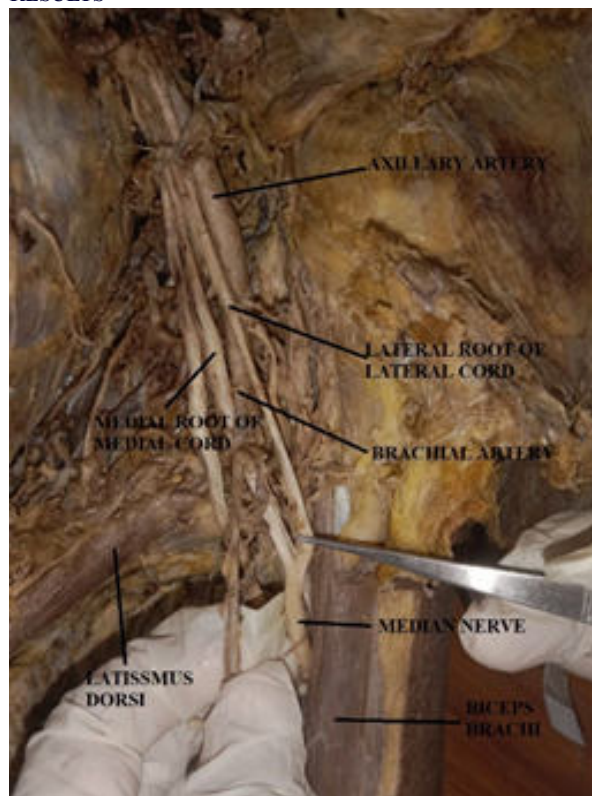


Fig.1: Formation Of Median Nerve At Mid Arm Level

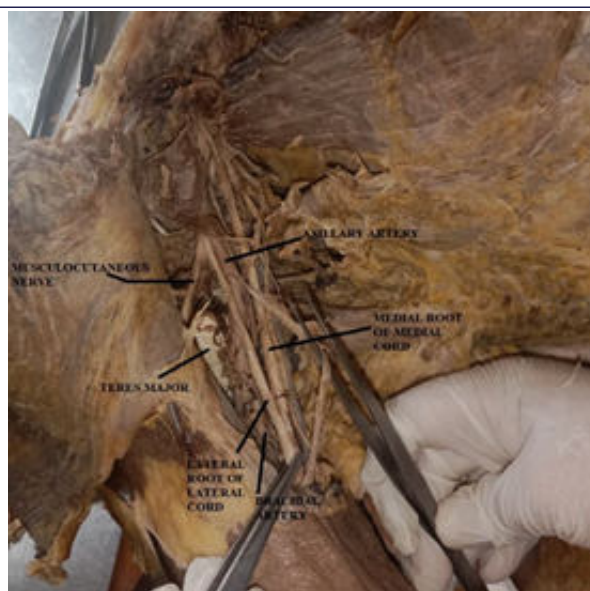


Fig.2: Level Of Formation Of Median Nerve

The median nerve was formed in the arm upper one-third by the union of medial and lateral roots. The medial and lateral roots originated from the corresponding cords of the brachial plexus.

The musculocutaneous nerve originated from the lateral cord of the brachial plexus. The musculocutaneous nerve passed downward and laterally and pierced the coracobrachialis muscle as usual.

The medial and lateral roots of the median nerve were longer than usual. This anomaly was found bilaterally.

DISCUSSION

A variation in the formation of the median nerve was observed in the literature. Sargon et al³ reported that the median nerve was formed of three branches.

The median nerve is usually formed in the axilla by the union of medial and lateral roots^{1,2}. In the present study low fusion of the two roots of the median nerve was found. They fused with each other in the upper part of the arm, reported in the literature. Testut and Latarjet (cited by Jakubowicz and Ratajczak¹⁶) reported that the lateral root united with the medial root at the level of the cubital fossa to form the median nerve. Jakubowicz and Ratajczak¹⁶ reported that the two roots of the median nerve united lower than normal. They added that the two roots united with each other at about 5 cm above the epicondylar line.

CONCLUSIONS

The knowledge about the abnormal level of formation of median nerve

reported in the present study has a clinical importance. These branches may be injured and give unusual clinical symptoms. The presence of these branches must also be kept in mind during the performance of surgery to avoid injury.

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