

Descriptive Anatomy of the Brachial Plexus and Anatomical Variations by Dissection in Cadaveric Specimens.

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Introduction

The information we currently have about the brachial plexus comes from studies of anatomical dissection, including the normal description and its variations.

Objective

To characterize the descriptive anatomy and anatomical variations of the brachial plexus in cadaveric patients.

Material and Methods

Dissection of the posterior neck triangle was made in a total of 6 cadaveric specimens, a total of 10 plexus; 6 on the right side and 4 on the left side.



Results

The plexus consisted of the roots of C5, C6, C7, C8 and T1 in all cases. The root of C5 and of T1 are smaller in diameter and C7 is the one that presents greater size. The roots C5 and C6 have a downward direction, C7 horizontal and C8 and T1 ascending. The upper trunk was formed by the union of C5 and C6, the middle trunk by C7 and the lower trunk by C8 and T1. The trunks upon entering the retroclavicular region present an anterior and posterior division, which later, upon joining, constitute the cords. The anterior division of the anterior trunk together with the anterior division of the middle trunk formed the lateral cord, this was found in 9 of 10 dissected cases, representing 90%, in the other case the anterior division of the middle trunk presented a double division, which provided a branch to conform the lateral fasciculus together with the anterior division of the upper trunk and another branch to form the medial fascicle together with the anterior division of the inferior trunk (figure). The medial fasciculus in 9 cases consisted solely of the anterior division of the inferior trunk. The posterior divisions of the three primary trunks formed the posterior fascicle. Finally, we observed the constant terminal branches in the 10 cases.

Discussion

In neither case was a prefixed or postfixed plexus found, and a variant was found in the formation of the fascicles, noting that the middle trunk provided one branch for the formation of the medial fascicle and another branch for the lateral fasciculus, it differs from the traditional descriptions.

Conclusion

This report is very valuable for the knowledge of the anatomy of the brachial plexus so our suggestion is to continue to perform dissections in order to compare the results with other published studies and to provide greater benefits to our patients.