

## **The Distributed Pattern of the Neurovascular Structures under Clavicle to Minimize Structural Injury in Clinical Field: Anatomical Study**

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**Abstract :** The aim of this study was to determine the location and distribution pattern of neurovascular structures superior and inferior to the clavicle by detailed dissection. Fifteen adult non-embalmed cadavers with a mean age of 71.5 years were studied. For measurements, the most prominent point of the sternal end of the clavicle (SEC) on anterior view and the most prominent point of the acromial end of the clavicle (AEC) were identified before dissection. A line connecting the SEC and AEC was used as a reference line. The surrounding neurovascular structures were investigated. The supraclavicular nerve was densely distributed at 71.73% on the reference line. Branches of the thoracoacromial artery were located at 76.92%. Branches of subclavian vein were evenly distributed at all sections. The subclavian vein and artery and brachial plexus were located from 31.3% to 57.5%. That area needs caution because major neurovascular structures run underneath the clavicle.

**Keywords :** clavicle, ORIF, neurovascular structure, anatomical study

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