The lacertus fibrosus of the biceps brachii muscle: an anatomical study

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BACKGROUND. The lacertus fibrosus (LF) is involved in various surgical procedures. However, the anatomy, morphometry, topography and biomechanical involvements of LF are not clear. The purpose of this study was to determine the anatomical and morphometric variations of LF, and to correlate this with anthropometric and morphometric meas- urements of the upper limb. Furthermore, the presence or absence of a deep layer of LF was verified using forearm cross-sections and dissections.

METHODS. This anatomical study was performed by observation of dissections and transverse sections obtained from 50 cadavers. Morphometric analyses [length and width of LF and biceps tendon, stature, length of upper limb, forearm, bi-epicondylar width, forearm perimeter, biceps brachii muscle perimeter (BBm)] were also performed.

RESULTS. The results demonstrated that there was no significant correlation between LF morphology and morpho- metric upper limb measurements. The deep layer of LF was observed in all spécimens [1].

CONCLUSION. Results of this paper indicate that the LF presents individual characteristics such as length and width. The deeper layer of LF was observed on all specimens. The possible role of LF in force transmission during flexion and supination, BBm moment arm adjustment and supination reduction is discussed in view of these results.

1. Snoeck O, Lefèvre P, Sprio E, et al. (2014) The lacertus fibrosus of the biceps brachii muscle: an anatomical study. Surg Radiol Anat 36:713–719.