THE APPROACHING METHOD TO MINIMIZE ANY NEUROVASCULAR INJURY FOR THE ANKLE ARTHROSCOPY: AN ANATOMICAL STUDY

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The aim of this study was to investigate the safety approach points on the anterior ankle arthroscopy to minimize the neurovascular injuries. Thirty-eight specimens from 21 cadavers (15 males, 6 females) were used for the study. For the measurements, the most prominent point of the lateral malleolus (LM) and the medial malleolus (MM) were identified before dissection. A line connecting the LM and MM is named as the reference line. All neurovascular structures are represented by where they pass through the reference line. The mean distance of the reference line, from LM to MM was 10.5 ± 0.8 cm. The greater saphenous vein (GSV) 80.3% and other vein also located at 79.0%. The vein medial side of the GSV was average located at 16.9%. The medial and intermediate dorsal cutaneous branches were located at 39.7% and 44.5%. The saphenous nerve and deep peroneal nerve were located at 81.6% and 49.8% from the LM. The tendons of extensor digitorum longus, extensor hallucis longus and tibialis anterior muscles were located at 39.7%, 55.2% and 65.2% in order from the lateral malleolus. These anatomical results will be useful in clinical settings especially ankle arthroscopy