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BACKGROUND: Carpal tunnel syndrome is the most common neuropathy of the upper limbs. It has a complex ethology but it is related to the compression of the median nerve by the connective structures at the wrist level. Some manual or fascial treatments try to increase the area of the carpal tunnel with the objective to release the compression on the nerve. The aim of this study was to observe if the fascial treatment could increase the space of carpal tunnel.

METHODS: 6 cryopreserved upper limbs from cadaveric specimens from Body Donors Program were used in the study. The morphology and morphometry of the carpal tunnel were analysed by ultrasound and an anatomical cut (at the level of the pisiform) during fascial mobilization technique. The mobilization technique consisted of a transverse and ventral force, manually applied on the carpal bones. During all procedure the carpal tunnel was analysed by photography and video.

RESULTS: During the fascial mobilization the anatomical and ultrasound images showed changes in the morphology and morphometry of the carpal tunnel. As well, the images showed a displacement of the median nerve around the connective tissue at that level of the wrist.

CONCLUSION: This study demonstrated that the fascial mobilization of the wrist produced changes in the shape of the carpal tunnel and produced a displacement of the median nerve and its morphology. This research
suggests that fascial mobilization could be a good treatment strategy for the carpal tunnel syndrome patients.