

Contribution to the anatomical study of sensory innervation of the wrist

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The wrist denervation is a surgical procedure with the intention to ease the pain and preserve the articular movement. The recommendation to the procedure is the painful limitation of the wrist movements, either caused by primary or secondary arthrosis to the fractures of scaphoid, Kienböck's disease, articular fractures of radial distal, and fractures or luxation of other carpal bones. The objective of this work is to describe the sensory innervation of the wrist which is essential to explore the surgical region. Macroscopic dissection of the superior members to 15 fresh corpses in the Anatomy Laboratory of Medical and Biological Science Center of PUC-SP. Our dissections showed that the following nerves contribute to the sensory innervation of wrist: anterior interosseous nerve and cutaneous palmar (branches of median nerve); branch cutaneous dorsal of ulnar nerve; superficial branch of radial nerve and posterior interosseous nerve (coming from the radial nerve). We did not find in our dissections the wrist innervation by medial cutaneous nerves (branch of ulnar nerve) and lateral cutaneous nerve of the forearm (branch of musculocutaneous nerves). Since pain persists in about two-thirds of patients after the surgery it may be the case that not all the articular branches are sectioned. So, the anatomy study of sensory innervation of the wrist is very important to the success of the surgery.

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