Camitz Tendon Transfer with CTR

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The Camitz tendon transfer is a well-known surgical procedure used to restore thumb opposition in patients who have experienced severe thenar atrophy secondary to carpal tunnel syndrome. It involves the creation of a new mechanism for thumb opposition by harvesting the palmaris longus tendon and inserting it on the APB muscle. It is well-presented in literature that the Camitz tendon transfer can restore thumb opposition, increase hand function, and improve grip strength, therefore significantly improving patient quality of life.

A 72 y.o. female presented for evaluation of her right wrist pain and hand numbness. In the past few months, she has lost muscle strength and been dropping items more frequently. Physical examination revealed severe APB atrophy. Radiographs revealed no significant findings. EMG demonstrated abnormal electrodiagnostic studies of the right upper extremity compatible with significant median compression neuropathy at the carpal tunnel, exhibiting both myelin dysfunction and axonal damage. Surgical intervention was pursued due to the hinderance on patient quality of life that the symptoms imposed.

A volar approach to the wrist using a Bruner style incision was made proximally across the wrist, and then longitudally into the distal forearm. The palmar fascia was raised in its entirety and in continuity with the proximal palmaris longus tendon. Once this is performed, attention is turned to the median nerve. There was an hourglass type deformity of the median nerve and epineural release was performed. The Camitz tendon transfer is then carried out, suturing the tubulerized palmar fascia to the insertion of the APB. Postoperatively, the patient was once again able to abduct her thumb.