

**Nabhan A, Ahlhelm F, et al. Simple Decompression or Subcutaneous Anterior Transposition of the Ulnar Nerve for Cubital Tunnel Syndrome. J Hand Surg Br 2002;30B:521-524.**

Design: Randomized clinical trial

Population/sample size/setting:

- 66 patients (38 men, 28 women, mean age 52) operated on for ulnar neuropathy at the elbow at a university neurosurgery department Hamburg, Germany
- Eligibility criteria not very explicit; all patients had persistent pain with progressive motor and sensory deficits, and all had electrodiagnostic studies of the ulnar nerve preoperatively by two blinded examiners, but the degree of deficit and the nerve conduction normal values are not specified
- Exclusion criteria were previous elbow surgery and deforming trauma on the same side; cervical spine and shoulder disease were excluded by clinical exam and MRI

Main outcome measures:

- Randomized to simple nerve decompression (n=32) or anterior subcutaneous transposition of the ulnar nerve (n=34)
- Follow-up was done at 3 and at 9 months
- The two groups improved equally in pain, ulnar intrinsic muscle strength, and in sensory deficits between baseline and three months, with improvements maintained at 9 months
- Nerve conduction velocity improved in both groups, but not in a statistically significant quantity

Authors' conclusions:

- Simple decompression produces benefits equal to ulnar nerve transposition
- Simple decompression would be favored over the more complex procedure, which may expose the ulnar nerve to vascular compromise

Comments:

- Lack of description of eligibility criteria prevents conclusions about which patient population would be affected by the operations
- Power calculation is not presented, making it unclear whether enough patients were enrolled to detect a difference in success rate or occurrence of complications
- Postoperative clinical and electrical tests not reported as blinded
- Although a plausible mechanism is presented for occurrence of complications with the more complex procedure, the number of postoperative complications is not reported

Assessment: Inadequate (lack of description of patient population, no blinding of postop exam, lack of power calculation for a "negative" study)