

Ucan H, Yagci I, et al. Comparison of splinting, splinting plus local steroid injection and open carpal tunnel release outcomes in idiopathic carpal tunnel syndrome. Rheumatol Int 2006;27:45-51.

Design: Randomized clinical trial

Brief summary of results:

- 57 hands (4 male, 53 female, mean age 44) Treated for CTS at a physical medicine department in Ankara, Turkey
- Randomized to splinting (n=23), splinting plus steroid injection (n=23), and surgery with open carpal tunnel release (n=11)
- Follow-up at 3 and 6 months was done on nerve conduction measurements, symptom severity, and functional status
- All three groups improved in symptom severity and functional status at 3 months, but at the 6 month follow-up, only the surgery group continued to improve over its 3 month outcome; the splint and the splint plus steroid group symptom severity and functional status was slightly worse at 6 months than at 3 months

Authors' conclusions:

- Splinting, splinting plus steroid injection, and surgical release are all effective in the short term of 3 months, but surgery is superior in the longer term

Comments:

- The number of patients corresponding to the number of hands is not clear; if some patients had bilateral CTS, their number is not specified
- The number of hands analyzed in the surgical group is only half the number in the splint and the splint plus steroid group; the number originally randomized to surgery is not clear (at least 4 patients did not accept surgery, and 6 others were excluded, but their treatment assignment is not stated)
- Attrition after randomization makes interpretation nearly impossible, and breaks the randomization
- The direction of bias cannot be predicted; surgery may have a larger or a smaller advantage than that measured by the study

Assessment: Inadequate (loss of randomization through attrition and failure to analyze by intention-to-treat)