Yang C-P, Hsieh C-L, et al. Acupuncture in Patients With Carpal Tunnel Syndrome. Clin J Pain 2009;25(4):327-333.

Design: Randomized clinical trial

Brief summary of results:

- 77 patients (63 women, 14 men, mean age 49) with CTS were treated in a university neurology department in Taiwan
- CTS was defined by both median nerve symptoms and nerve conduction studies (NCS)
- Randomization was into 4 weeks of prednisolone (20 mg qd for 2 weeks, then 10 mg qd for 2 weeks, n=39), or acupuncture (8 sessions of 30 minutes duration over 4 weeks, n=38), with concealment of allocation list
- Main endpoints were symptom scores in clinical interviews (based on pain, numbness, paresthesia, nocturnal awakening, and weakness/clumsiness), and neurologic examinations (including repeat NCS), all done by the same blinded examiner
- 70 patients completed 4 weeks of treatment and follow-up evaluation at the end of treatment; 4 steroid patients dropped out due to abdominal discomfort; 3 acupuncture patients dropped out due to inability to take time off work
- Both steroid and acupuncture groups had significant improvements (about 50%) in symptom scores between baseline and week 2; these improvements were maintained at week 4 (70% for acupuncture and 65% for steroid); the acupuncture and steroid groups did not differ from one another in the global symptom improvements
- Both groups also recorded approximately equal improvements in NCS scores between baseline and week 4
- Acupuncture was well tolerated by most patients, with no dropouts due to adverse effects; epigastric side effects caused 4 steroid patients to drop out

Authors' conclusions:

- In the short term, acupuncture is as effective as oral steroids for alleviation of symptoms of CTS
- Long term effects of acupuncture await evaluation in a large clinical trial
- Most patients in Asian countries have experienced acupuncture, and could have distinguished sham from real acupuncture, making sham acupuncture an unsuitable control intervention

Comments:

- Short term effects alone (final measurements at the end of 4 weeks of treatment) are not sufficient to make recommendations concerning acupuncture for CTS
- Functional measurements (on activities of daily living) would have been valuable but were not reported
- Blinding and concealment of allocation appear to have been adequately executed

- The control group received an intervention (oral steroids) which are not recommended in the guideline for most cases of CTS

Assessment: Inadequate for an evidence statement in support of acupuncture (lack of follow-up beyond end of treatment), but adequate to warrant removal of any guideline language that acupuncture is not indicated for CTS