Carpal Tunnel Relief Outcome Study Dolf R. Ichtertz, M.D. and Denise Mohr, L.P.N.

<u>Introduction</u>: CTS is a common problem that may be blamed on occupational activities by the patient. Poor results and prolonged time off of work both before and after surgery are often reported. Many common "treatments" are used unsuccessfully while CTR is usually definitive if accurately diagnosed with NCS.

<u>PURPOSE</u>: To scrutinize treatment results for a specific diagnosis, testing if a carefully planned and executed program of intense patient education, careful clinical monitoring, and adherence to a scientific diagnostic and treatment protocol can yield predictable, consistent outcome for patients treated under worker's compensation.

<u>STUDY FORMAT</u>: All patients were seen in a single specialty (orthopaedics) hand clinic under the direct care of a Board-Certified orthopaedic surgeon with a Certificate of Added Qualifications in Hand Surgery and his ancillary staff working directly with him seen upon referral in their office. Each patient was asked to complete a questionnaire encompassing a broad set of questions that address issues that are frequently of concern to patients with carpal tunnel syndrome. All patients included in the study were subjected to a nerve conduction study which confirmed the presence of entrapment neuropathy. The patients were thoroughly educated about all ramifications of treatment or nontreatment. The patients were given the option for definitive surgical treatment or living with the problem. Placebo and nonscientific, unproven methodologies were specifically not offered to the patients which, incidentally, saved thousands of dollars per patient. The patients who desired to solve their problem (the overwhelming majority) were taken to surgery and had either outpatient surgery and had either one, i.e., unilateral or both, i.e., bilateral wrist surgeries utilizing a two-portal endoscopic surgical technique (ECTR). All patients were given to the patients that might affect their ability to perform an occupational task. Each patient was given mild analgesic medications and was seen in the office before or after work hours tailored to individual patient needs. Specific home exercise was initialized on the first or second post-op day.

<u>MATERIALS & METHODS</u>: All 309 worker's compensation study patients were treated from January 15, 1997, through December 31, 2001. During the study period, there were another 614 patients treated on a non-industrial basis of roughly similar characteristics and with as good or better results are not included herein. Due to the success of this we have continued this protocol with thousands more patients.

<u>PATIENT DEMOGRAPHICS</u>: 309 patients/493 ECTR procedures: 133 treated with bilateral endoscopic carpal tunnel release. 176 treated with unilateral endoscopic carpal tunnel release. 203 women. 106 men. Mean age of women: 30s. Mean age of men: 40s. Failed nonscientific treatment (splinting, medications, vitamins) prior to coming to our office: 80%. Percent on disability prior to surgery: 4%. Percent on disability after release to return to work: 0%.

OCCUPATIONS OF PATIENTS TREATED:

- Heavy manufacturing
 Light office/secretarial
 Light manufacturing
- Construction
- Food Services
 Nursing
- Hair Styling
- Dental Hygiene

PATIENT SATISFACTION OUTCOME:

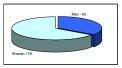
89% good or excellent. 11% fair. 0% poor. Time to return to work: Over 95% of the people were back to work at duties as tolerated (frequently their regular duties) within 3 calendar days.

PATIENT FUNCTIONAL OUTCOME: 100% excellent.

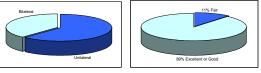
VOCATIONAL REHABILITATION: 100% returned to work.

Conclusion:

Work Comp patients can be expected to return to work rapidly as non-work comp with equally good results if managed with a thorough, scientific protocol. Sex Distribution



Patient Satisfaction Outcome



Case Distribution