



## AMERICAN ACADEMY OF ORTHOPAEDIC SURGEONS CLINICAL PRACTICE GUIDELINE ON

# The Treatment of Carpal Tunnel Syndrome

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### Summary of Recommendations

The following is a summary of the recommendations in the AAOS' clinical practice guideline, The Treatment of Carpal Tunnel Syndrome. This summary does not contain rationales that explain how and why these recommendations were developed nor does it contain the evidence supporting these recommendations. All readers of this summary are strongly urged to consult the full guideline and evidence report for this information. We are confident that those who read the full guideline and evidence report will also see that the recommendations were developed using systematic evidence-based processes designed to combat bias, enhance transparency, and promote reproducibility. This summary of recommendations is not intended to stand alone. The American Association of Neurological Surgeons and the Congress of Neurological Surgeons have endorsed this guideline.

- **Recommendation 1** A course of non-operative treatment is an option in patients diagnosed with carpal tunnel syndrome. Early surgery is an option when there is clinical evidence of median nerve denervation or the patient elects to proceed directly to surgical treatment. (Grade C, Level V)
- **Recommendation 2** We suggest another non-operative treatment or surgery when the current treatment fails to resolve the symptoms within 2 weeks to 7 weeks. (Grade B, Level I and II)
- **Recommendation 3** We do not have sufficient evidence to provide specific treatment recommendations for carpal tunnel syndrome when found in association with the following conditions: diabetes mellitus, coexistent cervical radiculopathy,

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**Disclaimer:** This clinical guideline was developed by an AAOS physician volunteer Work Group and is provided as an educational tool based on an assessment of the current scientific and clinical information and accepted approaches to treatment. It is not intended to be a fixed protocol as some patients may require more or less treatment. Patient care and treatment should always be based on a clinician's independent medical judgment given the individual clinical circumstances.

The complete AAOS guideline can be found at [www.aaos.org/guidelines](http://www.aaos.org/guidelines).

hypothyroidism, polyneuropathy, pregnancy, rheumatoid arthritis, and carpal tunnel syndrome in the workplace. (Inconclusive, No evidence found)

- **Recommendation 4a** Local steroid injection or splinting is suggested when treating patients with carpal tunnel syndrome, before considering surgery. (Grade B, Level I and II)
- **Recommendation 4b** Oral steroids or ultrasound are options when treating patients with carpal tunnel syndrome. (Grade C, Level II)
- **Recommendation 4c** We recommend carpal tunnel release as treatment for carpal tunnel syndrome. (Grade A, Level I)
- **Recommendation 4d** Heat therapy is not among the options that should be used to treat patients with carpal tunnel syndrome. (Grade C, Level II)
- **Recommendation 4e** The following treatments carry no recommendation for or against their use: activity modifications, acupuncture, cognitive behavioral therapy, cold laser, diuretics, exercise, electric stimulation, fitness, graston instrument, iontophoresis, laser, stretching, massage therapy, magnet therapy, manipulation, medications (including anticonvulsants, antidepressants and NSAIDs), nutritional supplements, phonophoresis, smoking cessation, systemic steroid injection, therapeutic touch, vitamin B6 (pyridoxine), weight reduction, yoga. (Inconclusive, Level II and V)
- **Recommendation 5** We recommend surgical treatment of carpal tunnel syndrome by complete division of the flexor retinaculum regardless of the specific surgical technique. (Grade A, Level I and II)
- **Recommendation 6** We suggest that surgeons do not routinely use the following procedures when performing carpal tunnel release: skin nerve preservation (Grade B, Level I) epineurotomy (Grade C, Level II) The following procedures carry no recommendation for or against use: flexor retinaculum lengthening, internal neurolysis, tenosynovectomy, ulnar bursa preservation (Inconclusive, Level II and V).
- **Recommendation 7** The physician has the option of prescribing preoperative antibiotics for carpal tunnel surgery. (Grade C, Level III)
- **Recommendation 8** We suggest that the wrist not be immobilized postoperatively after routine carpal tunnel surgery (Grade B, Level II). We make no recommendation for or against the use of postoperative rehabilitation. (Inconclusive, Level II).
- **Recommendation 9** We suggest physicians use one or more of the following instruments when assessing patients' responses to CTS treatment for research:

Boston Carpal Tunnel Questionnaire (disease-specific)

DASH – Disabilities of the arm, shoulder, and hand (region-specific; upper limb)

MHQ – Michigan Hand Outcomes Questionnaire (region-specific; hand/wrist)

PEM (region-specific; hand)

SF-12 or SF-36 Short Form Health Survey (generic; physical health component for global health impact) (Grade B, Level I, II, and III)