

CARPAL TUNNEL SYNDROME: CLINICAL PRACTICE GUIDELINES



FIGURE. Decision tree model. *Letters in parentheses reflect the grade of evidence on which the recommendation for each item is based: (A) strong evidence, (B) moderate evidence, (C) weak evidence, (D) conflicting evidence, (E) theoretical/foundational evidence, and (F) expert opinion.



CARPAL TUNNEL SYNDROME: CLINICAL PRACTICE GUIDELINES



(B) moderate evidence, (C) weak evidence, (D) conflicting evidence, (E) theoretical/foundational evidence, and (F) expert opinion.



CARPAL TUNNEL SYNDROME: CLINICAL PRACTICE GUIDELINES

Decision Tree Model

Carpal tunnel syndrome is a common problem, and it is important that clinicians arrive at an accurate diagnosis so interventions can be aimed appropriately. The proposed model provides an approach that includes information and test results that should be gleaned during the examination. Clinicians should recognize that data gathered can help in confirming the presence of the condition, aid in hypothesizing the severity, and provide baseline measures for treatment. Components include (1) examination, (2) evaluation, and (3) intervention strategies (**FIGURE**).

Component 1

The combination of the history and physical examination findings is crucial in determining the presence of CTS. Clinicians should also use the data gathered to help in determining the severity of the pathology if possible. Determining severity is a key component of patient care. The presence of severe pathology (indicated by thenar muscle atrophy) would indicate a need for referral to a hand surgeon. Clinicians may need to suggest NCS when the clinical examination is inconclusive.

Component 2

Evaluation of physical examination findings, as outlined in the **FIGURE**, should be consistent with the diagnosis of CTS and its severity suggesting either nonsurgical or surgical management is indicated. The diagnosis and management of the patient's condition should be appropriately modified if the evaluation of clinical findings related to the musculoskeletal impairments of body functioning (ICF) and associated tissue pathology/disease (ICD) suggest other upper extremity conditions or systemic or medical disease.

Component 3

This component includes a list of the evidence-based interventions available. The highest level of evidence supports the use of the neutral wrist orthosis. Clinicians should consider all contraindications as well as costs associated with each intervention. This component also includes the outcomes assessment, or measurement of change over time. The only validated tool for assessing change in individuals undergoing nonsurgical management is the CTQ-SSS. Other tools can be used, such as the CTQ-FS or DASH, but clinically important change scores have not been identified in those undergoing nonsurgical management.



Erickson M, Lawrence M, Stegink Jansen CW, et al. Hand pain and sensory deficits: carpal tunnel syndrome—clinical practice guidelines linked to the International Classification of Functioning, Disability and Health from the Academy of Hand and Upper Extremity Physical Therapy and the Academy of Orthopaedic Physical Therapy of the American Physical Therapy Association. J Orthop Sports Phys Ther 2019;49(5):CPG1-CPG85. doi:10.2519/jospt.2019.0301

©2019 Academy of Orthopaedic Physical Therapy and the Journal of Orthopaedic & Sports Physical Therapy®.