**Rinkel W, Schreuders T, et al. Current evidence for effectiveness of interventions for cubital tunnel syndrome, radial tunnel syndrome, instability, or bursitis of the elbow: a systematic review. J Hand Surg Am. 2012;37(1);3-8.**

PMID:22133704

Design: systematic review of randomized clinical trials

Purpose of study: to provide an evidence-based summary of the effectiveness of interventions for nontraumatic elbow pain from cubital tunnel syndrome, radial tunnel syndrome, instability, and bursitis

Summary of information and reasons not to cite as evidence :

* The authors did a satisfactory search of multiple databases through January 2012 in order to locate randomized trials for the four nontraumatic elbow conditions which were the focus of their intended systematic review
* The authors also had a satisfactory process for selecting studies and rating them for quality
* Although the review was well done, the authors did not report that the available studies adequately supported newly developed Division of Workers’ Compensation evidence statements which were not present in the 2010 guideline
  + No studies of any intervention were found for radial tunnel syndrome
  + For surgical treatment of cubital tunnel syndrome, the authors reported that simple decompression did not differ from anterior transposition of the ulnar nerve, citing a systematic review (Zlowodwski et al 2007), separately reviewed as showing an absence of evidence that either operation had been shown to be superior to the other
  + For nonoperative treatment of cubital tunnel syndrome, the authors cites one study with 12 subjects which was at a high risk of bias and did not find any additional benefit when local steroid injections were added to splinting
  + For nonoperative treatment of cubital tunnel syndrome, the authors also found one study, Svernlov 2009, previously reviewed as showing an absence of evidence that there are differences in outcome between nocturnal bracing, gliding exercises, and educational instruction regarding ulnar nerve anatomy and ways to ensure appropriate movements of the elbow; education in these concepts should be a first line of treatment
  + Other conditions in the review (elbow instability and olecranon bursitis) were outside the scope of the cumulative trauma guideline

Assessment: adequate systematic review which recapitulates existing evidence statements about treatment of ulnar neuropathy at the elbow but does not add new evidence. There is an absence of evidence that simple decompression and anterior transposition of the ulnar nerve have different effectiveness. If conservative treatment is being used, there is an absence of evidence for outcome differences between nocturnal bracing, gliding exercises, and simply educating patients about relevant anatomy, causes of symptoms, and avoidance of provocative movements of the elbow

References:

Svernlov B, Larsson M, et al. Conservative Treatment of the Cubital Tunnel Syndrome. J Hand Surg Eur 2009;34E:2:201-207.

Zlowodwski M, Chan S, et al. Anterior Transposition Compared with Simple Decompression for Treatment of Cubital Tunnel Syndrome. JBJS Am 2007;89:2591-8.