**Rabago D, Lee KS, et al. Hypertonic dextrose and morrhuate sodium injections (prolotherapy) for lateral epicondylosis (tennis elbow): Results of a single-blind, pilot-level, randomized controlled trial. Am J Phys Med Rehabil 2013;92:587-596**

PMID: 23291605

Design: Randomized clinical trial

Purpose of study: to evaluate the efficacy of prolotherapy for chronic lateral epicondylitis

Reasons not to cite as evidence:

* The article is a pilot study which compared a small number of patients randomized to three groups
  + A control group (“wait and see”, n=10 ) was counseled about risk modification for tennis elbow in work and activities of daily living, but did not have a control injection
    - The “wait and see” group was contacted by telephone at the same intervals that the prolotherapy groups were seen in clinic for their injections
  + A prolotherapy group (n=8) received injections of dextrose at 1, 4, and 8 weeks after entry, and were offered 20 tablets of 325 mg acetaminophen after each injection to use prn for pain
  + A second prolotherapy group (n=9) received injections of dextrose-morrhuate at 1, 4, and 8 weeks after entry, and were offered 20 tablets of 325 mg acetaminophen after each injection to use prn for pain
* The primary outcome was the change in the composite score of the Patient-Rated Tennis Elbow Evaluation (PRTEE) at 16 weeks
  + The prolotherapy groups had lower PRTEE scores at 16 weeks than the wait and see group
* The authors concluded that prolotherapy resulted in safe and significant improvements in pain and function compared to the wait and see group
* The main reasons not to cite as evidence are twofold
  + The wait-and-see group did not receive a control injection, and was not followed up in the same manner as the prolotherapy groups (phone calls versus clinic visits for the prolotherapy groups)
  + The study is a pilot study and is exploratory in nature
  + A previous pilot study of prolotherapy (Scarpone 2008) had 10 patients in a treatment group and 10 patients in a saline injection group, giving it greater control of bias than the current study, but a definitive trial remains to be done

Reference:

Scarpone M, Rabago DP et al. The Efficacy of Prolotherapy for Lateral Epicondylitis: A Pilot Study. Clin J Sport Med 2008;18:248-254.