**Chalmer J, Blakeway M, Adams Z, Milan SJ. Conservative interventions for treating hyperextension injuries of the proximal interphalangeal joints of the fingers. *Cochrane Database of Systematic Reviews* 2013; Issue 2.**

**PMID:** 23450596

**Reviewer:** Linda Metzger 9-17-15

**Design:** Cochrane Systematic Review (No meta-analysis)

**Objective:** To assess the effects of conservative interventions (non-surgical management) for treating hyperextension injuries of the proximal interphalangeal joints of the fingers within one month of injury that result in the best outcome for patients. The studies compared immobilization, protected mobilization, and/or unrestricted mobilization in participants.

**Summary of Results:**

* Includes 3 trials with a total of 366 patients. All three trials were over 20 years old.
* One trial compared unrestricted mobility with immobilization. One trial compared protected mobilization with immobilization. The remaining trial compared immobilization for one week versus three weeks. None of these trials found statistically significant differences between their intervention groups using various outcome measures such as poor outcome, pain, and range of movement at six months follow-up. This lack of significant difference held at 3 years for the comparison between unrestricted mobility and immobilization.
* The authors concluded that there is insufficient evidence on the need for, and the extent and duration of immobilization, to inform decisions for treating hyperextension injuries of the proximal interphalangeal joints.

**Reasons not to Cite as Evidence:**

* None of the studies reported on self-assessment of function.
* The present search went through January 2012.
* While it is possible that these 3 trial populations are representative, the lack of detailed information on the baseline characteristics of the trial participants on all three trials reduces the confidence on the applicability of their findings.
* The quality of evidence available for the purpose of this review is very low. Because of the very low quality of the evidence and no outcome data on function, we are uncertain about the magnitude of the effects on function.
* All 3 trials were methodologically flawed with unclear or high risk of bias.
  + Norregaard 1987 was at high risk of attrition bias and selection bias due to inadequate random sequence generation and allocation concealment, and incomplete reporting of outcome data. This study was also quasi-randomized.
  + Thomsen 1979 was the only study to report an adequate method of random sequence generation, but provided no information on allocation concealment or reporting of outcome data.
  + Thomsen 1995 did not report an adequate method of random sequence generation and provided no information on allocation concealment or reporting of outcome data.
  + For the three included trials, it was not possible to blind treatment providers or the patients to the interventions included. None of the trials had adequate blinding of outcome assessors, but blinded assessors could have been used to review and record clinical outcomes in order to reduce detection bias.

**Assessment:**

* High quality Cochrane review that shows there is inadequate evidence for the effectiveness of immobilization for treating hyperextension injuries of the proximal interphalangeal joints of the fingers.