**Peters-Veluthamaningal C, van der Windt DAWM, Winters JC, Meyboom - de Jong B. Corticosteroid injection for trigger finger in adults. *Cochrane Database of Systematic Reviews* 2009; Issue 1.**

**PMID:** 19160256

**Reviewer:** Linda Metzger 10-16-15

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

**Objective:** To assess and summarize the evidence on the effectiveness and safety of corticosteroid injections for treating adults with trigger finger.

**Summary of Results:**

* Primary outcome measures included treatment success, frequency of triggering or locking, functional impairment of fingers, and severity of pain in the trigger finger.
* Included 2 randomized controlled studies involving 63 participants with 34 allocated to corticosteroids and lidocaine, and 29 allocated to lidocaine alone. Results showed that intra-tendon sheath corticosteroid injection with lidocaine was more effective than lidocaine alone on treatment success at 4 weeks (relative risk 3.15, 95% CI 1.34 to 7.40). The number needed to treat to benefit was 3. No adverse events or side effects of the steroid injection were reported.
* The methodological quality of the two studies was poor and there were some flaws in the quality of reporting. Both studies used pseudo-randomization, either allocating patients based on date of birth (Lambert 1992) or on day of presentation (Murphy 1995). In the Lambert study, the outcome assessor was blinded, there was reporting of withdrawals and dropouts, and eligibility criteria were specified. Concealment of allocation, blinding of care provider and patients, and similarity of groups at baseline regarding the most important prognostic indicators were unclear and no intention-to-treat analysis was used. In the Murphy 1995 study, the outcome assessor and patient were blinded, but the care provider was not. Withdrawals and dropouts were reported, an intention-to treat analysis was used, but no concealment of allocation was used. It was unclear whether the two treatment groups were similar at baseline regarding the most important prognostic indicators.
* The authors concluded that there is only low quality evidence that showed better short-term effects of corticosteroid injection combined with lidocaine compared to lidocaine alone on the treatment success outcome for trigger finger. In one study the effects of corticosteroid injections lasted up to four months. The evidence of the effectiveness of local corticosteroid injections is based on only two small randomized controlled trials of poor methodological quality. The applicability of these findings to daily clinical practice may be limited. No adverse effects were observed. Corticosteroid injections are an easily applicable treatment modality, not expensive, and less invasive than surgery. The appropriate initial treatment for patients should be corticosteroid injection rather than surgery as a first-line intervention.
* Overall, there is insufficient evidence to conclude that corticosteroid injections are effective in the treatment of trigger finger.

**Reasons not to Cite as Evidence:**

* Only 2 studies that were 20 years old or older were included in this review.
* The sample sizes (39 and 24) for the included studies were small.
* The risk of bias and overall quality of the evidence was low in this review.
* This low quality evidence does not meet our literature critique criteria and would not qualify for an evidence statement.
* Because the limited evidence is of low quality, further research is very likely to have an important impact on our confidence in the estimate of effect and is likely to change the estimate, and so we are uncertain about the magnitude of the effect, and thus no useful conclusions can be drawn.

**Assessment:**

* High quality Cochrane review that shows there is inadequate evidence that corticosteroid injections are effective in the treatment of trigger finger.

**References:**

* Lambert MA, Morton RJ, Sloan JP. Controlled study of the use of local steroid injection in the treatment of trigger finger and thumb. The Journal of Hand Surgery 1992; 17(1): 69–70.
* Murphy D, Failla JM, Koniuch MP. Steroid versus placebo injection for trigger finger. The Journal of Hand Surgery1995; 20(4):628–31.