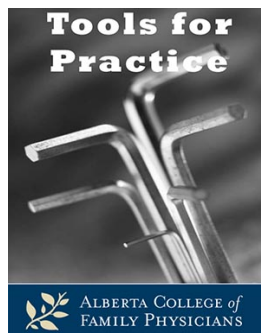


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Reviewed: April 20, 2015
Evidence Updated: 3 RCTs and 1 systematic review added
Bottom Line: Physiotherapy benefit added
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Steroid Injections & Lateral Epicondylitis (Tennis Elbow) – What is the Evidence?

Clinical Question: Are corticosteroid injections effective in the management of lateral epicondylitis (tennis elbow)?

Bottom-line: Corticosteroid injections are effective for symptom management of lateral epicondylitis in the short term (≤ 4 weeks), however in the long term (6-12 months) they result in poorer outcomes than no intervention at all. Physiotherapy seems to have the best outcomes overall.

Evidence:

- Randomized controlled trial (RCT) of 198 patients with long-term outcomes of corticosteroid injections:¹
 - At three weeks: Corticosteroid injections significantly reduced symptoms compared to physiotherapy or wait-and-see, Number Needed to Treat (NNT)=2.
 - By 52 weeks: Corticosteroids injections had significantly worse outcomes, Number Needed to Harm (NNH)=4.
 - Recurrences significantly worse in corticosteroid injections group (72%) versus physiotherapy (8%) or wait-and-see (9%).
- RCT of 165 patients randomized to corticosteroid injection, physiotherapy, both (steroid/physio), or placebo.²
 - At four weeks: Steroid or steroid/physio much improved or better in 68-71% while physiotherapy was 39% and placebo was 10%.
 - At 52 weeks: Steroid or steroid/physio much improved or better in 82-84% while physiotherapy was 100% and placebo was 93%.
 - Recurrence: Steroid or steroid/physio was 54-55% while physiotherapy was 5% and placebo was 20%.
- Systematic review (12 RCTs, 1,171 patients) of steroid injection for lateral epicondylitis.³
 - 3-7 weeks: Corticosteroid injections significantly improved pain and function over no intervention or NSAIDs (inconsistent evidence for physical therapy).

- 26 weeks and one year: Corticosteroid injections significantly less effective than no intervention.
 - Magnitude of these findings is difficult to determine due to heterogeneity and differences in reporting among trials.
- More recent long-term RCTs and a systematic review found similar.⁴⁻⁶

Context:

- Other systematic reviews⁷ and evidence-based reviews⁸ also report corticosteroid injections are helpful in short-term but are no better or worse in the long-term.
- The natural history of epicondylitis is that 83%⁹ to 90%¹ will heal within a year with a simple wait-and-see approach.
 - In high-quality studies of varying primary care populations, response to steroids and other treatments is very consistent at one, six, and 12 months.¹⁰

Original Authors:

Christina Korownyk MD CCFP, G Michael Allan MD CCFP

Updated:

Adrienne J Lindblad BSP ACPR PharmD

Reviewed:

G Michael Allan MD CCFP

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