

# FPIN's Help Desk Answers

## Treatments for de Quervain Tenosynovitis

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### Clinical Question

Are corticosteroid injections better than conservative treatment in patients with de Quervain tenosynovitis?

### Evidence-Based Answer

Corticosteroid injections are no better than thumb spica orthoses for decreasing pain in patients with de Quervain tenosynovitis. (Strength of Recommendation [SOR]: B, based on a meta-analysis of low-quality randomized controlled trials [RCTs].) When combined with orthoses, corticosteroid injections and acupuncture are equally effective for improving function and decreasing pain. (SOR: B, based on a low-quality RCT.)

### Evidence Summary

A 2016 systematic review and meta-analysis of six RCTs (N = 334) compared the effectiveness of corticosteroid injection vs. thumb spica orthosis or a combination of the two treatments for the management of de Quervain tenosynovitis.<sup>1</sup> Participants were diagnosed clinically using a positive Finkelstein or Eichhoff test. Corticosteroid injections consisted of methylprednisolone (five studies; 10 to 40 mg) and triamcinolone (one study, dose unknown). Three studies compared injections with orthoses, and three studies

compared combined injections and orthoses with orthoses or injections alone. Treatment success was defined by a negative Finkelstein test and no pain (four studies), or a decrease in pain on a visual analog scale (two studies). After three to 26 weeks, orthoses alone had a lower rate of treatment success compared with combined injections and orthoses (two studies; N = 181; relative risk [RR] = 0.53; 95% confidence interval [CI], 0.35 to 0.80). At three weeks, corticosteroid injections alone had a lower rate of treatment success compared with combined injections and orthoses (two studies; N = 167; RR = 0.76; 95% CI, 0.64 to 0.89). Orthoses alone compared with corticosteroid injection alone had similar success rates at two to three weeks (three studies; N = 172; RR = 2.5; 95% CI, 0.79 to 7.8). Study limitations included lack of blinding or concealed allocation.

A 2013 nonblinded randomized study (N = 30) analyzed the effectiveness of acupuncture vs. corticosteroid injections in patients with de Quervain tenosynovitis over seven months.<sup>2</sup> Participants were diagnosed by history and a positive Finkelstein test. The acupuncture group received five treatment sessions in one week using a standardized technique, and the corticosteroid injection group received a single injection of 40-mg methylprednisolone and lidocaine 2%.

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## HELP DESK ANSWERS

Both groups received thumb spica splinting after the interventions. Outcomes evaluated included functional status (evaluated by the Disabilities of the Arm, Shoulder and Hand questionnaire; range = zero to 100, with lower scores indicating less disability) and pain (using a 10-point visual analog scale). Disability scores improved significantly in both groups from baseline to six weeks (61 to 6.1 in the injection group vs. 64 to 9.8 in the acupuncture group;  $P < .001$ ), as did pain scores (6.7 to 1.2 in the injection group vs. 7.1 to 2.1 in the acupuncture group;  $P < .001$ ). Limitations include lack of blinding and follow-up for seven months.

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### References

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