

The Impact of Prolotherapy and Steroid Injection on De Quervain's Tenosynovitis: A Retrospective Outcome Study

Proloterapi ve Steroid Enjeksiyonunun De Quervain Tenosinoviti Üzerindeki Etkisi: Retrospektif Sonuç Araştırması

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Dear Editor,

I read with interest the article by Zora and Bayrak [1] titled "Effect of Prolotherapy and Steroid Injection on De Quervain Tenosynovitis: Retrospective Outcome Study". I appreciate the authors of this study comparing the effects of prolotherapy and steroid injection on short-term functional outcomes in patients with De Quervain stenosing tenosynovitis. Based on this study, I have an important statement and comments in order to develop future studies on De Quervain Tenosynovitis.

De Quervain's tenosynovitis is the stenosing tenosynovitis of the M. Abductor Pollicis Longus (APL) and M. Extensor Pollicis Brevis (EPB) tendons located in the 1st dorsal compartment of the wrist, under the dorsal carpal ligament and radial tunnel. De Quervain's tenosynovitis is usually recognized clinically, and the classic test used in diagnosis is the Finkelstein test. Although this test is considered pathognomonic for De Quervain, the patient may have difficulty in distinguishing the pain

of tenosynovitis in the radial styloid from different pathologies such as thumb arthritis/arthrosis etc. The specificity of the Finkelstein test is good, but there are arguments against this method due to false-positive results and examination discomfort, as it can also cause pain in healthy individuals [2]. However, in clarifying the diagnosis, it would be better to use an objective imaging method such as ultrasonography, which is easily accessible, fast and effective, especially during injection treatment. Because, the detection of abnormalities in tendon sliding movement, narrowing in the fibro-osseous channel or thickening in the tendons can be recognized by ultrasonography [3].

In this study, VAS (visual analog scale) was used for wrist evaluation, QuickDASH (Quick Disability Assessment of Arm, Shoulder, and Hand Problems) and HAQ (Health Assessment Questionnaire) were used for hand and wrist function and problems. Since hand grip functions may be weakened, especially in De Quervain tenosynovitis, hand grip strength could be checked before and after treatment. Evaluation

of standard, palmar and lateral grips, which are the grip types most used in daily living activities and expected to be affected by De Quervain's tenosynovitis, in terms of position and strength. In De Quervain's tenosynovitis, it is observed that the functionality of the hand is affected and the intense pain caused by weakness in the APL and EPB muscles or increased tension in these muscles causes a decrease in endurance in hand functions. Therefore, using tests that more objectively evaluate the functionality of the hand, such as the Minnesota test, to evaluate the functionality and endurance of the hand would make the future studies on de Quervain's Tenosynovitis study more meaningful [4].

In addition, the isolated effect of prolotherapy and steroid injection could not be evaluated due to the lack of a placebo (non-treatment) control group in the study and the administration of cold application, massage and home exercise program to both groups. It would be more more valuable in evaluating effectiveness in future studies of De Quervain's tenosynovitis if patients were compared only with prolotherapy and steroid injection, independent of other treatments. Also, further research may be designed in the future to better evaluate other potential predictors of treatment success, such as conservative treatment options include thumb spica splinting or kinesiio taping for De Quervain's tenosynovitis.

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Editorial Note and Authors' Response: I appreciate this scientific letter on Zora and Bayrak's [1] article, "The impact of Prolotherapy and Steroid Injection on De Quervain's Tenosynovitis: A Retrospective Outcome Study." On the other side, the authors of the original article claimed that the assessments and insightful explanations about the article contributed to a better understanding of the subject and content.