

Quantitative Measure Corticosteroid Injection For De Quervain's Tenosynovitis

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INTRODUCTION:

De Quervain's Tenosynovitis is abnormal gliding of Abductor Pollicis Longus and Extensor Pollicis Brevis in a narrow fibro-osseous compartment causing inflammation. The pain gets worse with abduction of thumb, grasping action of the hand and ulnar deviation of the wrist. Corticosteroid injection is a method of treatment to relieved the symptom. This study to evaluate the functional outcomes of this treatment.

METHODS:

Patient diagnosed with De Quervain's tenosynovitis in Hospital Pakar Sultanah Fatimah (HPSF) are given corticosteroid injection. The functional outcome measured using pinch test (KG), tip pinch test (KG) and tripod pinch test (KG) by using Jamar pinch gauge. Baseline measurement obtain prior to study and compared to 6 weeks after theinjection.

RESULTS:

The ANCOVA analysis was conducted and showed that the outcome of post-intervention pinch test are significantly improved in comparison with pre-intervention test.

Table 1 showing ANCOVA Test

Pinch test	Pre- Intervention p-value	Post- Intervention p-value
Lateral pinch test(Kg)	0.001%	0.001%
Tip pinch test(Kg)	0.001%	0.001%
Tripod pinch test(KG)	0.001%	0.001%

DISCUSSIONS:

The ANCOVA analysis showed that the outcome of the post-intervention pinch test were statistically significant ($p < 0.001$) from the pre-intervention test. The mean of pre-intervention lateral pinch grip ($4.23\text{KG} \pm 1.449$), Tip pinch Test ($2.80\text{KG} \pm 1.337$) and Tripod Pinch Test ($3.34\text{KG} \pm 1.396$). However the mean of post-intervention lateral pinch test ($5.97\text{KG} \pm 1.466$) Similarly, the tip pinch test showed higher means ($4.35\text{KG} \pm 1.470$). On top of that, the post-intervention tripod pinch test ($4.97\text{KG} \pm 1.457$) were also shows marked improvement.

CONCLUSION:

Based on the study we are able to quantify the benefit of corticosteroid injection in treatment of De Quervain's Tenosynovitis.

REFERENCES:

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