Functional Outcome Of Operative Lacertus Release In Patients Post Carpal Tunnel Release

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INTRODUCTION:

Carpal tunnel release (CTR) is a commonly performed procedure with a generally high success rate. However, a notable percentage of patients (2-25%) continue to experience persistent or recurrent symptoms following surgery. The lacertus fibrosis represents a common site of proximal median nerve compression. This study aims to evaluate the outcomes of operative lacertus release in individuals who have previously undergone carpal tunnel release.

METHODS:

The study included 42 patients who underwent carpal tunnel release between 2018 and 2020 with persistent symptoms of median nerve compression. The clinical outcomes of lacertus release were evaluated were evaluated at preoperative, postoperative.

RESULTS:

There is significant association between VAS, DASH, grip strength, and pinch strength of pre-op score and post-op.

Table 1 Comparison between Pre-op and Post-op (6 weeks, 3-months, and 6-months) and comparison Post-op score 6 weeks, 3-months, and 6-months.

Score	Pre-Op	6 weeks Post-Op	3- Months Post-Op	6-Months Post-Op
	mean ± sd	mean ± sd	mean ± sd	mean ± sd
VAS	6.00 ± 1.225*	3.89 ± 0.782* ** **	2.56 ± 0.726* **	1.56 ± 1.130* ***
QuickDASH	53.80 ± 7.704*	32.08 ± 7.885* ** **	15.64 ± 8.557* **	12.23 ± 5.556* ***
Grip Strength	13.67 ± 3.279*	18.56 ± 5.411* ** **	20.89 ± 6.585* **	23.56 ± 5.725* *** +
Pinch Strength	6.78 ± 2.863*	10.78 ± 3.701* ***	12.00 ± 4.717*	12.67 ± 4.472* ***

* comparison between pre-op and post-op (6 weeks, 3-months, and 6-months), ** comparison between post-op 6 weeks and 3-months, *** comparison between post-op 6 weeks and 6-months, + comparison between post-op 3-months and 6-months

DISCUSSIONS:

Results of the current study showed that the scores of VAS, QuickDASH decreased considerably at 6-3-months and 6-months weeks, post-surgery compared to pre-surgery. Meanwhile, grip strength and pinch strength of the patients showed considerable amount of increase at 6-weeks, 3months and 6-months post-surgery compared to presurgery. This indicated that the pain and hand disability of patients significantly decreased as well as the grip strength and pinch strength significantly improved following lacertus release surgical procedure.

CONCLUSION:

The study's findings suggest that the implementation of operative lacertus release in individuals with a history of carpal tunnel release yields positive outcomes, including pain relief, enhanced functional capacity, and improved hand strength.

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