## Patient-Perceived Time to Recovery After Carpal Tunnel Release

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INTRODUCTION: Carpal tunnel release (CTR) is the most commonly performed hand surgery procedure, yet the time until patient-reported full recovery has not been published. There is limited literature on patient perceptions of recovery after surgery; patients and surgeons may have differing views on time until full recovery.

METHODS: In this prospective study, patients who underwent isolated CTR completed questionnaires preoperatively and at multiple time points following surgery until they reported full recovery. Patients completed 0 – 10 Likert scale for pain, the QuickDASH, and the Boston Carpal Tunnel Questionnaire (BCTQ) Symptom Severity Scale (SSS) and Functional Status Scale (FSS), and were also asked if they felt fully recovered at 4 weeks, 6 weeks, 3 months, 6 months, 9 months, and 12 months.

RESULTS: The average time to self-reported full recovery was 5.5 months (SD 2.6). At 12 months, six out of 51 patients (11.8%) did not feel fully recovered. The mean Likert pain score, QuickDASH, BCTQ-SSS, and BCTQ-FSS significantly improved from preoperative to full recovery, and the mean differences in these four measures exceeded the MCID. Postoperative scores surpassed preoperative scores for the four metrics above by 8,11,14, and 15 weeks, respectively. Higher preoperative scores were all associated with failure to fully recovery by 12 months postoperatively. DISCUSSION AND CONCLUSION: The time until patient-reported full recovery after surgery after isolated CTR is substantial and surprising. Patients and surgeons may assess different parameters when measuring recovery. Surgeons expected should aware discrepancy when discussing recovery of this Table 1. Demographic breakdown Table 2. Pre- and post-operative survey values, presented as mean; SD.

Variable	Outcome
Age [mean; SD]	65.9; 13.1
Sex [n, %]	
Female	32, 62.7
Male	19, 37.3
Depression [n, %]	14, 27.5
Anxiety [n, %]	14, 27.5
Tobacco Status [n, %]	
Never	29, 56.8
Former	21, 41.2
Current	1, 1.9
Alcohol Use Status [n, %]	
Never	21, 41.2
Moderate	30, 58.8
Workman's Compensation [n]	0, 0
Employment Status [n, %]	
Employed	26, 50.9
Retired	22, 43.1
Unemployed	2, 3.9
EMG Result [n, %]	
Mild	7, 16.6
Mild to Moderate	1, 2.4
Moderate	10, 23.8
Moderate to Severe	7, 16.6
Severe	17, 40.5

Variable	Pre-Operative	Post-Operative**
Likert Scale	4.4; 3	1.1; 1.9
QuickDASH	61.6; 19.7	33.5; 12.2
BCTQ		
Symptom Severity	2.8; 0.76	1.4; 0.41
Functional Severity	2.3; 0.82	1.3; 0.36

\*\*At final recovery time