Feasibility of early active mobilisation following flexor tendon repair in a developing country context: A Randomised Pilot Study

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Introduction: Violent assaults are a primary cause of flexor tendon injuries in South Africa, resulting in temporary or permanent disability for patients. Current therapeutic outcomes are not promising. Existing rehabilitation-regimen research emerged from developed countries; and mostly quantifies therapy outcomes using rupture rates and range of motion. Distinctively, this research takes the realities of the South African context into consideration. An early active therapy protocol was formulated, towards improved functional outcomes.

Objectives: This research aims to optimise functional outcomes for public-health-sector patients. In addition to predictable outcome measures, focus is placed on the patient’s functional outcome and return to occupational pursuits.

Method: This RCT will evaluate the use of an early active mobilisation protocol against a primarily passive mobilisation protocol. Outcome measures include: Range of motion, grip strength, the Smith Hand Function Evaluation, and the Michigan Hand Questionnaire. Descriptive statistics; the Shapiro-Wilk Test evaluating data distribution; T-tests or Mann-Whitney U test will be used in data analysis.

Results: Preliminary results will be shared. Descriptive statistics for patient factors will be presented. Results will highlight contrasts between objective, subjective and functional outcomes. This study challenges the current reliance on ROM as an outcome, mindful it is not necessarily indicative of good function.

Conclusion: This study strives to demonstrate whether the use of early active mobilisation would result in improved therapy outcomes. The use of outcomes that are patient-centred, evaluate activity and participation, and capture observed function makes this study unique. Recommendations will be made for practice, education and research.