Determinants of positive functional outcomes at 16 weeks after flexor tendon repair at a tertiary hospital in South Africa: A descriptive, analytical study

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Introduction: Flexor tendon injuries account for a substantial number of all hand injuries presenting at health care facilities, yet rehabilitation following flexor tendon repair remains a challenge. There is limited research pertaining to flexor tendon rehabilitation in under resourced countries such as South Africa.

Objectives: To determine the functional outcomes 16 weeks after flexor tendon repair and establish an epidemiological profile of this group.

Method: A quantitative, descriptive, analytical design was used. All patients presenting to the health facility with a flexor tendon injury between February and July 2017 formed the sample. Total active movement, muscle strength and hand function (using the Disabilities of the Arm Shoulder and Hand (DASH) questionnaire) were assessed at 4, 8, 12 and 16 weeks post operatively. This data and information obtained from therapy notes were correlated with possible determining factors (for example, surgical technique, rehabilitation protocol, adherence to home programme, age and so on). A stepwise bivariate analysis and multiple regression analysis was conducted to discover which variables were predictive of positive and negative functional outcomes. Descriptive data were analysed to determine the epidemiological profile of this.

Results: The factors predicting positive and negative functional outcomes will be presented and the epidemiological profile will be outlined and discussed.

Conclusion: The findings will be used to recommend rehabilitation interventions that promote a better positive functional outcome in flexor tendon repair in contexts with limited resources.