

Effectiveness of Metacarpophalangeal Joint Blocking Splint and Hand Therapy to Treat Trigger Digit.

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ABSTRACT

The purpose of this study was to evaluate the effectiveness of Hand Therapy and Metacarpalphalangeal (MCP) joint blocking splinting designed to reduce symptoms for trigger finger as a first treatment option. This study was a prospective single group, pre-post design with 39 participants fit with custom made thermoplastic MCP blocking splint. The pre- and post-treatment measures included: Numeric Pain Rating Scale (NPRS), Stages of Stenosing Tenosynovitis (SST), and the number of triggering events in ten active fists. These measures were taken at the time of initial assessment before start the intervention and after six weeks of continuous intervention with hand therapy and splint. Participants were given home advice for their trigger finger individually and do the exercises independently. After the six weeks intervention with hand therapy and splint, the study result found that after the intervention of trigger digits reduce symptoms in 100% participants. In NPRS score, mean pretest 9.19 (SD 0.768) and post-test 3.04 (SD 1.468). In the stages of stenosing tenosynovitis (SST) scale, mean pre-test 4.75 (SD 0.556) 2.62 (SD 0.889). In the number of triggering events in 10 active fists score, mean pre-test 9.42 (SD 1.016) and post-test 3.12 (SD 1.854). Data showed statistically significant improvement of trigger digit by the six weeks intervention. This study demonstrated a benefit of participants from the intervention with Hand therapy and MCP blocking splint for an isolated incidence of trigger digit based on chosen outcome measures.