Influence of Different Types of Hand Splints on Flexor Spasticity in Stroke Patients

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**Abstract**

**Objective:** The aim of this study is to evaluate the efficacy of each static and dynamic splint on hand flexor spasticity and to compare between their effectiveness on hemiplegic patients.

**Design:** Randomized controlled trial.

**Location:** King Fahad hospital, Dammam Medical Complex, UODC, Emam Abdulrhman Hospital.

**Subject:** 30 hemiplegic (stroke) patients (50-80 Y/o) with mild to moderate spasticity of upper limb. The onset of stroke was from 6 month to one year before starting the study.

**Intervention:** The patients were randomly assigned into two equal study groups of 15 (A and B). The assessment were performed pre and post application of static splint for group A and dynamic splint for group B. The duration of splint application was one hour for ***what period of time*** both groups. All participants were receiving the traditional treatment program ***(designed program of treatment)*** of hemiplegia after application of splint.

**Outcome measures:** 1) The mean of active and passive range of motion for wrist extension using goniometer, and 2) Grip strength by using digital hand dynamometer.