

**Functional Performance After Stroke:**  
A Study of Shoulder Pain and Techniques to Improve  
Functional Performance

Prepared By

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## Abstract

**Introduction:** Shoulder pain is a common complication following stroke. Incidences of shoulder pain have been reported to be as variables as 38-84%. Shoulder in stroke patients was an important predictor of poor functional recovery of the arm and increase length of hospital stay.

**Purpose:** The purpose of this study was to determine the effectiveness of shoulder mobilization along with different positioning for shoulder pain after stroke.

**Design:** Quantitative multi-case study design was used for this research project. Due to time constraint and limited resources the case study was limited to three (3) cases.

**Subjects:** The subjects were selected by convenient sampling method. Subjects were chosen according to inclusion and exclusion criteria from the Outdoor Occupational Therapy Department at CRP.

**Outcome Measures:** All the subjects were assessed at entry (week 0) and at the end of the treatment period (week 5-6). A visual analogue scale (VAS) was used to assess shoulder pain severity where as functional independence measure (FIM) was used for functional outcome during movements performed for functional purpose.

**Results & Discussion:** The results of this study showed that the treatment techniques were effective. The difference between pre-test and post-test was statistically significant (related *t* test); VAS,  $P < 0.0005$  and FIM,  $P < 0.0005$ ). Hemiplegic shoulder requires coordinated multidisciplinary management to minimize interfere with rehabilitation and optimize outcome. Further research is required to generalize the results and evaluate the effectiveness of the treatment techniques for long-term rehabilitation.

**Key Words:** Stroke, Shoulder pain, Functional performance, and Treatment techniques.