



## Service Priorities and Programmes Electronic Presentations

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### **Advanced Prediction of Functional Outcomes and Discharge Destination in Hip Fracture Patients using Premorbid Functional Assessments**

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#### **Introduction**

For many years, various functional outcome measures have been widely used in monitoring the progress of rehabilitation in hip fracture. Inpatient rehabilitation of hip fracture is considered completed if there is no further improvement in mobility and basic activities of daily living (ADL) for a reasonable period of hospitalization. However, if discharge planning depends solely on the progress of rehabilitation and could not be predicted in advance, hospitalization will be unnecessarily prolonged, which is a health-economic issue. In our clinical experience, rehabilitation potential after hip fracture is highly related to and limited by the premorbid functional status. In the literatures, there were only few studies investigating on the relationship between premorbid functional status and functional outcomes in hip fracture in our locality.

#### **Objectives**

In this cohort study, we try to define good or fair rehabilitation potential by comparing the final functional outcomes, declines in functional outcomes and discharge destination in patients with different premorbid functional statuses.

#### **Methodology**

82 patients admitted for hip fracture and received operative treatment were divided into group A (good rehabilitation potential) and group B (fair rehabilitation potential) based on four premorbid functional assessments: Modified Functional Ambulation Category (MFAC), Modified Barthel Index (MBI), Hong Kong Montreal Cognitive Assessment 5-Minute and Functional Prognosis Predictive Score. Main outcome measures include: final MFAC and MBI upon discharge after inpatient rehabilitation, declines in MFAC and MBI, discharge destination and total length of stay.

#### **Result**

Group A achieved a significantly better ambulatory level in terms of final MFAC greater than or equal to V (supervised walker). Majority of patients in Group A had decline in MFAC up to one category. For independence in basic ADL in terms of MBI, Group A achieved a median score of 91 which is classified as slight dependence and significantly better than Group B. The decline in MBI is also significantly less in Group A. All of the patients in Group A returned to home, in which six of them (25%) could be directly discharged from acute hospital with the mean length of stay of 17 days. On the other hand, near one in four in Group B were transferred to nursing home upon discharge and five of them (8.6%) were originally residents in nursing home pre-fracture. Based on our findings, a new clinical pathway for geriatric hip fracture is proposed to direct the rehabilitation and discharge plan in Tseung Kwan O Hospital and Haven of Hope Hospital.