



Service Priorities and Programmes
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Early Mobilisation Programme in Intensive Care Units – An evaluation of Phase I Trial

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Introduction

Immobility is one of the causes for significant long-term impairment in critically ill patients. Several studies indicated that early mobilization in intensive care units (ICUs) was safe and improved functional status at hospital discharge. Studies indicated that early mobilization in the ICU was feasible and safe. With early physiotherapy intervention and structured mobility protocol have shown to reduce length of stay (LOS) in ICU.

Objectives

To establish an early mobilization exercise protocol and evaluate its feasibility and effectiveness.

Methodology

Patients receiving open hepatobiliary surgery were screened and recruited for the programme during ICU stay. Patients with unstable haemodynamic; frequent desaturation; recent acute myocardial injury or arrhythmia and recent administration of inotropic agents were excluded. A 4-level exercise protocol was established which was based on patients' conscious level and strength of large muscle groups as listed below. The protocol embraced progressive regime which ranges from passive range of motion therapy, neuromuscular electrical stimulation (NMES), muscle strengthening exercise to upright activities such as sitting, standing and ambulatory training. The LOS in ICU, total LOS, mobility status at discharge and discharge destination were collected. Any adverse events such as dislodgement of tubes and unexpected change in vital signs were recorded.

Result

Results: 11 eligible patients were recruited into the programme. This cohort composed of 7 males and 4 females with a mean age of 66.8±6.7 years old. All the recruited patients were independent outdoor walkers before surgery. The median ICU LOS and the median total LOS were 3 days and 8 days respectively. All of the patients were able to attain mobility level at MFAC VII (outdoor walker) and were discharged home.

No adverse event was noted during the intervention period. Conclusion: This preliminary report demonstrated that early mobilization in ICUs in a busy Hong Kong hospital environment was safe and potentially beneficial to the critically ill patients. Therefore, the putative benefits in critically ill patients suffering from acute respiratory failure is worthwhile for further study so as to expand our knowledge in the effectiveness of early mobilization in ICU.