中文題目:早期心肺復健對加護病房存活病人之影響

英文題目: The effect of early cardiopulmonary rehabilitation on the outcomes of intensive care unit survivors

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Background: This study aims to compare the impact of early and late post-discharge cardiopulmonary rehabilitation on the outcomes of intensive care unit (ICU) survivors.

Methods: The study was a retrospective investigation from a sub-database of the Taiwan National Health Insurance Research Database (NHIRD). All patients with ICU admission ever received cardiopulmonary rehabilitation between 2000 and 2012. The patients received subsequent cardiopulmonary rehabilitation after ICU discharge were grouped into two groups. Early group was patients had received rehabilitation within 30 days, and late group was patients had received rehabilitation between 30 days and one year after ICU discharge. The end points were mortality and re-admission during the 3-year follow-up.

Results: Among 2136 patients received cardiopulmonary rehabilitation after ICU discharge, 994 was classified early group and other 1142 patients were classified as late group. Overall, early group had a lower mortality rate (6.64% vs 10.86%, p = 0.0006), and a lower ICU readmission rate (47.8% vs 57.97%, p < 0.0001) than late group after 3-year follow-up. Kaplan-Meier analysis showed that early group had significantly lower mortality (p=0.0009) and readmission rate (p<0.0001) than late group. In multivariate analysis, the risk of ICU readmission was found to be independently associated with late group (Hazard Ratio, 1.28; 95% confidence interval, 1.13-1.47).

Conclusion: Early post-discharge cardiopulmonary rehabilitation among ICU survivors had the long-term survival benefit and significantly decreased the readmission rate.

Keywords: Intensive care unit, early cardiopulmonary rehabilitation, mortality, readmission