

中文題目：長期使用吸器病人併急性腎損傷研究_健保資料

英文題目：The impact of advanced kidney injury on long-term prognosis of patients requiring prolonged mechanical ventilation: nationwide population-based study

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Background: Prolonged mechanical ventilation (PMV) is increasingly common worldwide, consuming enormous healthcare resources. Factors that modify PMV outcome are still obscure.

Methods: We selected new patients under PMV in the Taiwan's National Health Insurance (NHI) system during 1998-2007 for comparison of mortality and resource use. They were divided into three groups: (1) patients with end-stage renal diseases (ESRD) before the index admission for PMV onset; (2) patients with de novo advanced acute kidney injury (AKI) requiring dialysis during admission; and (3) patients without advanced AKI requiring dialysis during admission. We used a random-effects logistic regression model to identify the factors associated with mortality.

Results: Compared with the other two groups, Group 2 received significantly longer mechanical ventilation, more frequent use of vasopressors, had longer intensive care unit/hospital stay and higher inpatient expenditures during the index admission. Relative to Group 1, Group 2 was associated with an elevated mortality hazard (relative risk ratios=1.32, 1.23, 1.12, 1.06, 1.06, and 1.10 for mortality rates at discharge, 3 months, 6 months, 1 year, 2 years and 3 years after PMV, respectively), indicating that de novo advanced AKI requiring dialysis during an admission with new incidence of PMV could have a long-lasting harmful effect.

Conclusions: AKI requiring dialytic support occurring during an admission with PMV care could bring about higher risk of death and larger demand for healthcare resources than pre-existing ESRD.

Keywords: Acute kidney injury, Mechanical ventilation, Renal insufficiency, End-stage renal disease