

中文題目：高風險慢性阻塞性肺病病人在困難脫離呼吸器之呼吸衰竭的整體存活率和呼吸器脫離成功率

英文題目：English Overall survival and weaning rates for high-risk chronic obstructive pulmonary disease patients who experienced difficult-to-wean acute respiratory failure

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Introduction

Invasive mechanical ventilation (IMV) can lead to catastrophic impact to life quality. A significant proportion of patients with chronic obstructive pulmonary disease (COPD) died of complications during the course or became long-term dependent to IMV.

Objectives

To investigate the weaning determinants, overall survival, and cumulate wean rate of difficult-to-wean (IMV \geq 7 days) COPD patients, and to explore the use of intensive and supportive procedures for treating these patients during IMV.

Methods

From the Taiwan National Health Insurance Research Database, 3,100 difficult-to-wean COPD patients were identified and classified into: (1) successful weaning \leq 20 days (Group I: 38%), (2) successful weaning within 21–60 days (Group II: 11%), or (3) death or using IMV \geq 61 days (Group III: 51%).

Results

Median survival time and cumulate wean rate were XX% and 53%, respectively. For patients in group III, the median and average length of IMV were 12 days and 114 days, respectively; and only 12% were successfully liberated from IMV. Independent predictors for weaning \leq 21 days were male (HR=1.14; 95% CI [1.00–1.29]), coronary care unit admission (HR=1.41; 95% CI [1.17–1.70]), and using long-acting beta-2 agonists or long-acting muscarinic antagonists prior to the index date (HR=1.37; 95% CI [1.01–1.85]). During IMV period, patients in Group III were more likely to receive cardiopulmonary resuscitation (41.17%; $p < 0.0001$); hemodialysis (6.66%; $p < 0.0001$), vasopressors (75.05%; $p < 0.0001$) and opioids (25.97%; $p < 0.0001$).

Conclusion

Difficult-to-wean COPD patients had a dismal overall survival and only 38% could be successfully weaned from IMV \leq 20 days. Patients with worse outcome tended to

experience more distressing intensive procedures during the IMV. These facts should be clearly disclosed during the process of shared decision making to the patients as well as family.

Keyword:

high-risk chronic obstructive pulmonary disease

Overall survival and weaning rates