

中文題目:慢性阻塞性肺病接受冠狀動脈繞道手術之預後

英文題目: Postoperative complications after coronary artery bypass grafting in Patients with Chronic obstructive pulmonary disease

作者:廖光明<sup>1</sup>, 陳怡蓁<sup>2</sup>, 王志中<sup>2</sup>, 何宗翰<sup>2</sup>

服務單位: 奇美醫療財團法人佳里奇美醫院內科部<sup>1</sup> 奇美醫療財團法人醫學研究部<sup>2</sup>

**Background:** Coronary artery disease is a common disorder in patients with chronic obstructive pulmonary disease (COPD) because COPD and coronary artery disease share smoking as a common risk factor and therefore frequently coexist. The growth of surgery and analgesia over the past decade has a significant impact on outcome. The postoperative complication after coronary artery bypass grafting (CABG) in patients with COPD in Asian patients with COPD still unknown. To resolve this important issue, we conducted a nationwide cohort study to visit the mortality rates in different time periods and post operation complication in Patients with COPD after CABG surgery.

**Methods:** We selected patients receiving CABG between January 1, 2009 and December 31, 2013 (ICD9: 361, 362). The definition of a patient with COPD was a patient discharged from a hospital with a diagnosis of COPD (ICD-9-CM codes: 490-492, 496). Patients with cancer history and younger than 40 years of age before CABG were excluded. The index date was the date of CABG. The total comorbidity within the one year preceding and after the index date will be measured. These comorbidities included hypertension, diabetes, dyslipidemia, cardiovascular disease, cerebrovascular disease, and chronic kidney disease. They were followed from the index date to up to the occurrence of the outcome, death, or the end of study follow-up (December 31, 2013), whichever came first.

**Results:** There are 14858 patients without COPD and 758 patients with COPD received CABG. Before matching, the length of stay was longer in patients with COPD with a median day of 20 and median day of 17 in patients without COPD. Compared with patients with COPD, patients without COPD had higher mortality rate at 365 days, but no difference at 30 or 90 days. The wound infection rate also similar between these two groups. The readmission rate at 30 days was higher in COPD group compared with non-COPD group. The acute respiratory failure was the most common reason for readmission after CABG (16.57%) and the second most common reason were pneumonia (10.91%). The case number of pulmonary embolism was small in these two groups.

**Conclusions:** Patients with COPD should not preclude CABG surgery based on the current study.