

中文題目：慢性腎衰竭病人發生下肢靜脈栓塞或肺栓塞之風險

英文題目：Incidence of deep vein thrombosis or pulmonary embolism in patients with end stage renal disease

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**Background:** Patients with end stage renal disease (ESRD) tend to bruise and bleed more easily. The risk of deep vein thrombosis (DVT) or pulmonary embolism (PE) is lower in Asian populations compared to Caucasian populations. Previous studies have focused on the prevalence of DVT and PE in patients with ESRD in Caucasian populations. There are no estimates of the nationwide incidence of DVT or PE in Asian and the primary purpose of this study was to determine the actual incidence of DVT or PE in patients with ESRD in Asian populations.

**Methods:** A longitudinal cohort study was designed in dialysis patients. Adult patients (age  $\geq 18$  yr) of ESRD on maintenance hemodialysis (HD) (who initiated HD treatment between January 1, 2003, and December 31, 2009) were selected. The index date was the date of first-time COPD diagnosis. We excluded the patients who had been diagnosed with PE or DVT (The International Classification of Diseases, Ninth Revision, Clinical Modification [ICD-9-CM]: 453.8) before index date. The control group was frequency-matched according to age (3-year stratum), sex, and the year of admission, at a 2:1 ratio. Patients were followed from index date to when either a diagnosis of PE or DVT was made, death occurred, December 31, 2010 was reached, or when the patients withdrew from the National Health Insurance program.

**Results:** The overall incidence rate of PE or DVT was 210 per 1,000 person-years in patients with ESRD, and the adjusted hazard ratio of PE or DVT in patients with ESRD was 11.54 (95% confidence interval 7.99-16.66), which was greater than patients without ESRD after adjusting for age, sex, atrial fibrillation, hypertension, diabetes, hyperlipidemia, cerebrovascular accident, congestive heart failure, lower leg fracture or surgery, and cancer. After further analysis of the comorbidities in ESRD population, these comorbidities did not increase risk of PE or DVT.

**Conclusion:** Asian patients with ESRD have a higher incidence of PE or DVT than non-ESRD patients. Among patients with ESRD, comorbidities including atrial fibrillation, hypertension, diabetes, hyperlipidemia, cerebrovascular accident, congestive heart failure, lower leg fracture or surgery, and cancer did not put ESRD population at high risk of PE or DVT.