中文題目:發炎性腸道疾病與心血管事件的發生率增加相關

英文題目: Inflammatory Bowel Disease is Associated with an Increased Incidence of

Cardiovascular Events: A Nationwide Population-based Case-control Study

作 者: 鄭宇辰<sup>1</sup>, 陳惇杰<sup>2</sup>

服務單位: 高雄醫學大學附設醫院內科部感染科1, 高雄市立大同醫院內科部感

染科<sup>2</sup>

Background: Atherosclerosis is considered as a chronic inflammatory disease. Although the causes of inflammatory bowel diseases (IBD), including Crohn's disease and ulcerative colitis, were still unclear, IBD can stimulate increasing in serum cytokines and cause microbial translocation. These chronic inflammatory processes can enhance early atherosclerosis development. Several articles were reported that IBD was related to arterial thromboembolic events, endothelial dysfunction and increasing intima-media thickness of carotid artery. But the causal relationship of IBD and cardiovascular diseases, such as coronary heart diseases and stroke, was still lack. So we conducted this study to identify whether IBD is a risk factor of cardiovascular diseases.

**Methods:** A total of 269,645 study subjects were identified from the National Health Insurance in 1996 and followed up from 1997 to 2013. The demographic characteristics between patients with IBD and cardiovascular diseases, including age, gender, hypertension, diabetes, dyslipidemia, and chronic kidney diseases, were analyzed using the  $\chi 2$  test. Cox proportional hazard regression models were used to determine the independent effects of IBD on the risks of cardiovascular diseases.

**Results:** A total of 53,981 patients of IBD were followed up from 1998 to 2013. After

adjusting for age, gender, hypertension, diabetes, dyslipidemia, and chronic kidney diseases, the incidences of acute myocardial infarction, angina, congestive heart failure and coronary artery diseases post angioplasty or stenting in IBD patients were independently higher, with risk ratios of 1.42 (95% confidence interval [CI], 1.29-1.56), 1.38 (95% CI, 1.32-1.43), 1.24 (95% CI, 1.17-1.32), 1.29 (95% CI, 1.04-1.59), and 1.39 (95% CI, 1.03-1.89), respectively. Stroke, transient ischemic attack or coronary artery bypass grafting were not significantly associated with IBD.

**Conclusion:** We used the National Health Insurance database to demonstrate that IBD is an independent risk factor for coronary heart disease but not stroke.