中文題目:年輕台灣成年人發生 ST 節段上升心肌梗塞之危險因子和住院期間預後分析 英文題目: Risk factors and in-hospital outcome of acute ST segment elevation myocardial infarction in young Taiwan adults

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**Background:** The incidence of ST elevation myocardial infarction (STEMI) in young people was low, but has recently begun to rise. It is not clear what mechanism causes early acute coronary obstruction. Several studies have focused on this issue but the results varied. In Taiwan, the data is still lack. The aim was to investigate the risk factors and in-hospital outcomes of STEMI in young Taiwan adults.

**Methods:** We conducted a case control study. The young age group was defined as male <45 years and female < 55 years. Within July 2009 and Sep 2013, a total of 62 consecutive STEMI patients were assigned to young group while 296 STEMI patients were assigned in older age group. We compared the clinical features and hospital outcomes between the two groups.

**Results:** The mean age of the young and older patient groups was  $40.6 \pm 5.8$  years and  $63.0 \pm 10.3$  years respectively. Hyperlipidemia (33.9 vs. 19.3%; P = 0.0113), current smokers (78.7 vs. 46.2%; P < 0.0001), obesity (19% vs. 8.7%, P = 0.0198) were significantly associated with the risk of STEMI in the young group compared to older group. Young STEMI patients also had significantly higher total cholesterol (195.1  $\pm 50.2$  vs. 174.5  $\pm 50.9$ mg/dL; P = 0.0049), and LDL (128  $\pm 45$  vs. 113.8  $\pm 37.6$ mg/dL; P = 0.0112). More ventricular arrhythmia (21 vs. 8.5%; P = 0.0036), and CPCR (16.1 VS. 7.4%; P = 0.0291) under similar medication, angiographic result, and reperfusion strategy were noted in younger group. There were no differences in the length of hospital stay, major adverse cardiac events, in-hospital mortality, and 1-year hospital mortality.

**Conclusion:** Younger STEMI patients have a different risk profile and similar in-hospital outcomes compared to the older patients. Control of preventable risk factors such as smoking, obesity and dyslipidemia should be reinforced at an early age in Taiwan.