THE ROLES OF COMMON CAROTID ARTERY INTIMA-MEDIA THICKNESS AND COMPLEX CORONARY LESIONS IN RISK STRATIFICATION OF NON-ST-ELEVATION ACUTE CORONARY SYNDROMES

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Mei Weiyi, Du Zhimin, Wang Qian, Xu Qin, Zheng Dongdan, Chen Guowei, Mei Weiyi. Department of Cardiology, The Huangpu Division of The First Affiliated Hospital, SUN Yat-sen University, Guangzhou 510700, China; Department of Cardiology, The First Affiliated Hospital, SUN Yat-sen University, Guangzhou 510080, China

Objectives To explore the relationship of common carotid intima-media thickness (CIMT) and the coronary lesions’ morphology with the Thrombolysis in Myocardial Infarction (TIMI) risk score for non-ST-elevation acute coronary syndrome (NSTEMI). And evaluate the roles of CIMT in risk stratification of NSTEMI.

Methods One hundred and thirty-two patients with NSTEMI were recruited. CIMT were measured, and the coronary angiographies were analysed to detect the single or multiple complex coronary stenotic lesions. Their correlation with TIMI risk score and its variables were investigated.

Results Satisfying images of CIMT were obtained in one hundred and twenty-three patients (99.2%), and the general CIMT was 0.83 ± 0.22 mm. Sixty-two patients (50.4%) had an abnormal (≥0.8 mm) CIMT, whilst 52 patients (39.4%) only had single complex coronary lesions and 80 (60.6%) had multiple complex coronary lesions. CIMT was correlated with TIMI risk score (E190 Heart 2012;98(Suppl 2): E1–E319).
(Pearson r=0.25, p=0.004), whilst the presence with multiple complex lesions was associated with TIMI risk scale (p<0.01). Using a logistic regression analysis, the presence of an abnormal CIMT was only related to age ≥65 [OR: 3.52 (CI 1.48 to 9.37), p=0.001] and diabetes mellitus [OR: 3.85 (CI 1.66 to 8.91), p=0.004]. The presence with multiple complex lesions was also associated with age ≥65 [OR: 17.32 (CI 6.53 to 52.34), p<0.001] and diabetes mellitus (OR: 3.06 (CI 1.84 to 8.73), p=0.006).

**Conclusions** CIMT and the presence of multiple complex lesions in patients with NSTEACS are correlated with TIMI risk score. Both variables were related to age and diabetes. CIMT can act a role in the risk stratification of NSTEACS.