The Long-term Clinical Prognosis in Patients with Anterior Wall and Non-anterior Wall Acute Myocardial Infarction Referred to Primary Percutaneous Transluminal Coronary Angioplasty

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ZHAO et al.: The Long-term Clinical Prognosis in Patients with Anterior Wall and Non-anterior Wall Acute Myocardial Infarction Referred to Primary Percutaneous Transluminal Coronary Angioplasty. Objective: To investigate the long-term clinical prognosis in patients with anterior wall acute myocardial infarction (AW-AMI) and non AW-AMI (NAW-AMI) referred to primary percutaneous transluminal coronary angioplasty (P-PTCA). Methods: 287 patients with AMI who underwent P-PTCA were divided into AW-AMI group (142 cases) and NAW-AMI group (145 cases) according to different sites of AMI. The baseline characteristics and coronary artery lesions of patients were analysed. The primary end points were in-hospital mortality and the major cardiovascular events (MACE) during a mean 17.3±9.8 months follow-up including the occurrences of non-fatal myocardial infarction, non-fatal congestive heart failure, revascularization of target vessels and overall cardiac-related death. Results: The peak values of CK and CK-MB were significantly higher (3533±2888 U/L vs 2322±1638 U/L, 158±197 U/L vs 95±64 U/L, all P<0.01), and left ventricular ejection fraction decreased (0.55±0.13 vs 0.61±0.12, P<0.05) and in-hospital mortality increased significantly (4.1% vs 0, P<0.05) in AW-AMI group than in NAW-AMI group. At a follow-up of mean 17.3±9.8 months, the incidences of non-fatal heart failure, in-hospital mortality, total cardiac-related mortality and combined end points in AW-AMI group increased significantly than those in NAW-AMI group (all P<0.05). Multivariate analysis revealed that anterior location of myocardial infarction and proximal left anterior descending (LAD) coronary artery lesion were associated with the occurrence of cardiac-related death in patients with AMI after procedure of PTCA (all P<0.05). Conclusions: The present study shows that anterior location of myocardial infarction is associated with a higher incidence of MACE. The long-term clinical outcomes are poorer in patients with AW-AMI than NAW-AMI referred to P-PTCA. (J HK Coll Cardiol 2002;10:3-6)

Key words: Acute myocardial infarction, angioplasty, percutaneous coronary, prognosis, transluminal