GW23-e2116

SHORT- AND LONG-TERM OUTCOMES OF CORONARY REVASCULARISATION IN PATIENTS WITH SEVERE LEFT VENTRICULAR DILATATION

doi:10.1136/heartjnl-2012-302920l.6

Xiao Wang, Shaoping Nie, Changsheng Ma, Xiaohui Liu, Jianzeng Dong, Xin Du, Rong Hu, Junping Kang, Qiang Lv, Xinmin Liu, Fang Chen, Shuzheng Lv, Shaoping Nie. *Beijing Anzhen Hospital, Capital Medical University*

Objectives Patients with coronary artery disease accompanied by severe left ventricular dilatation (LVD) are at higher risk for heart failure and death. However, their clinical and angiographic profiles, short- and long-term outcomes after revascularisation are unknown.

Methods A total of 4283 patients (median age 60.0 years; 77.4% male) undergoing coronary revascularisation in our centre from July 2003 to September 2005 were stratified according to end-diastolic dimension (EDD). Patients with severe LVD (EDD > 70 mm), mild/moderate LVD (EDD 52.7 mm to 70.0 mm in males, EDD 48.3 mm to 70.0 mm in females), and no LVD (EDD < 52.7 mm in males, EDD < 48.3 mm in females) was compared for outcome analysis.

Results Patients with severe LVD had more complex lesions (eg, chronic total occlusions, multi-vessel disease) with more prior myocardial infarction, valvular impairments and renal dysfunction (all $p < 0.001$). Patients successfully discharged were followed up for a median of 548 (455–669) days. Severe LVD was significantly associated with increased in-hospital mortality (5.4% vs 1.6% vs 1.0%, $p < 0.001$) and composite ischaemia (6.9% vs 2.5% vs 2.1%, $p < 0.001$) compared with mild/moderate LVD and no LVD groups. By multivariable analysis, severe LVD was a significant independent predictor of in-hospital (HR 1.858, 95% CI 1.323 to 2.611, $p < 0.001$) and follow-up mortality (HR 1.697, 95% CI 1.253 to 2.298, $p = 0.001$) after revascularisation.

Conclusions Patients with severe LVD have more co-morbidities and complex coronary lesions. Severe LVD in patients undergoing coronary revascularisation was an independent predictor of early and late mortality and adverse ischaemic outcomes.