Cardiovascular disease clinical research

Ischaemic heart disease

GW23-e0244

LONG-TERM OUTCOMES OF COMPLETE VERSUS INCOMPLETE REVASCLARISATION AFTER DRUG-ELUTING STENT IMPLANTATION IN PATIENTS WITH MULTIVESSEL CORONARY DISEASE

doi:10.1136/heartjnl-2012-302920j.1

¹Zhan Gao, ¹Bo Xu, ¹Yue-jin Yang, ¹Hong-bin Yan, ¹Ji-lin Chen, ¹Shu-bin Qiao, ¹Yong-jian Wu, ¹Xue-wen Qin, ¹Min Yao, ¹Jin-qing Yuan, ¹Hai-bo Liu, ¹Jue Chen, ¹Run-lin Gao, ²Yue-jin Yang. ¹Department of Cardiology, Cardiovascular Institute and Fuwai Hospital, Chinese Academy of Medical Sciences and Peking Union Medical College, Beijing, China; ²Department of Cardiology, Cardiovascular Institute and Fuwai Hospital, Chinese Academy of Medical Sciences and Peking Union Medical College

Objectives This study is sought to investigate the impact of complete revascularisation (CR) versus incomplete revascularisation (IR) on long-term outcomes in patients with multivessel coronary disease (MVD) in current percutaneous coronary intervention (PCI) practice.

Methods Between April 2004 and November 2010, 7376 consecutive patients with MVD underwent PCI at the Fuwai Hospital in Beijing, China. Patients who underwent prior CABG and those who had an acute myocardial infarction (MI) within 24 h before revascularisation or presented with cardiogenic shock were excluded.

Results Among 7065 patients with MVD undergoing PCI treatment, angiographic CR was performed in 1188 patients (16.8%), and proximal CR in 2053 patients (29.1%). The study found that either angiographic or proximal IR were associated with significantly higher estimated 3-year rate of cardiac death (2.55% vs 1.13%, log-rank $p=0.016$; and 2.70% vs 1.43%, log-rank $p=0.024$, respectively). After adjustment for differences in baseline characteristics between IR and CR patients, angiographic IR was associated with a significantly higher rate of cardiac death (adjusted hazards ratio [HR]: 2.56, 95% CI 1.03 to 6.41) while proximal IR was associated with a numerically higher rate of cardiac death (adjusted HR: 1.72, 95% CI 0.93 to 3.17). For the subgroup of ≥ 2 -vessel IR with total occlusion, either angiographic or proximal IR patients had significantly higher rate of cardiac death (adjusted HR: 4.25, 95% CI 1.50 to 12.09; and adjusted HR: 3.02, 95% CI 1.40 to 6.52, respectively).

Conclusions Compared with IR, patients with CR had better clinical outcomes, especially when only single vessels were treated, supporting CR as first choice for patients with MVD.