

In-hospital outcomes following staged percutaneous coronary intervention			
	Staged PCI in the same hospitalization (n=184)	Staged PCI at a separate hospitalization (n=98)	P value
Major adverse cardiac events	6 (3.3%)	1 (1.0%)	0.43
Death	5 (2.7%)	0 (0%)	0.17
Urgent coronary artery bypass graft	1 (0.5%)	1 (1.0%)	1.00
Procedure-related acute renal failure	7 (3.8%)	1 (1.0%)	0.27
Vascular complications	6 (3.3%)	3 (3.1%)	1.00
Major bleeding	3 (1.6%)	2 (2.0%)	1.00

CRT-56

Role Of Coronary Artery Calcium Score In Patients With Stable Angina Pectoris Underwent Multivessel Percutaneous Coronary Intervention

Jiangli Han,¹ Fangfang Wang,¹ Rong He,¹ Xiangzhu Zeng,² Fuchun Zhang,¹ Lijun Guo,¹ Wei Gao¹

¹Department of Cardiology & Key Laboratory of Cardiovascular Molecular Biology and Regulatory peptides, Ministry of Health; Peking University Third Hospital, Beijing, China

²Department of Radiology, Peking University Third Hospital, Beijing, China

Objectives: This study sought to identify whether coronary artery calcium score (CCS) is associated with procedure complexity, procedure-related complications and long-term clinical outcomes in patients with stable angina pectoris (SAP) underwent multivessel percutaneous coronary intervention (PCI).

Methods: 145 SAP patients (male/female, 103/42; age, 65±10 years) who underwent first multivessel PCI following multi-detector computed tomography (MDCT) were enrolled. We standardized MDCT results into 3 CCS categories (0 to 100, 101 to 400, and >400) according to recent guidelines. Complex PCI was defined as use of high pressure balloon, kissing balloon and/or rotablator. Procedure-related complications included target artery occlusion, dissection, perforation, no/slow flow and emergency coronary artery bypass grafting. Major adverse cardiac events (MACE) were defined as a combined end point of death, non-fatal myocardial infarction, target lesion revascularization and rehospitalization for cardiac ischemic events.

Results: As compared with the patients with CCS≤100 (n=39), those patients with CCS 101 to 400 (n=41) and CCS >400 (n=65) had significantly higher PCI procedure complexity (20.5% vs 46.3% vs 38.5, $p = 0.040$). And patients with CCS>400 (n=65) had a higher rate of procedure-related complications than patients with CCS <184>400 (n=80) (26.2% vs 6.3%, $p = 0.001$). Three patients (0.02%) were missed during a median of 21 months' (1 ~ 69 months) follow-up. Kaplan-Meier survival analysis showed that patients with CCS 0 to 100, 101 to 400 and >400 had similar cumulative non-events survival rates (89.5% vs 82.4% vs 75.0%, $p = 0.342$). However, it showed significant different cumulative non-events survival rates in female subgroup (100% vs 83.3% vs 58.8%, Log rank 6.005, $p = 0.049$).

Conclusions: Preprocedural CCS assessment by MDCT indicates complexity of PCI and procedure-related complications in patients with SAP underwent multivessel PCI. CCS is more relevant with MACE in female patients.

CRT-57

Hybrid Coronary Revascularization (hcr) In Patients With Multi-vessel Coronary Disease (mvd): Mid-term Results

Alberto Repossini,¹ Maurizio Tespili,² Antonio Saino,² Igor Kotelnikov,¹ Annalisa Moggi,¹ Lorenzo Di Bacco,¹ Claudio Muneretto¹

¹Cardiac Surgery, University of Brescia, Brescia, Italy ²Cardiology Unit, Azienda Ospedaliera Bolognini, Seriate, Italy

Objective: Hybrid Coronary Revascularization, meaning Left Mammmary Artery on Left Anterior Descending (MIDCAB) combined with non-LAD PCI stenting, is considered as a viable alternative to conventional CABG through sternotomy or to multi-vessel PCI, in order to perform a functionally complete revascularization. We report our results and mid-term outcomes of this therapeutic strategy.

Methods: Since January 2009 up to October 2012, 70 consecutive patients underwent hybrid revascularization after Heart Team evaluation. Coronary risk was assessed by SYNTAX score, and patients were partitioned in tertiles according to the score categories (≤22 low risk, >22 and ≤33 intermediate risk, >33 high risk). Pre-operative risk assessment was upgraded to EuroSCORE II for all patients. Long-term outcomes, major adverse cardiac and cerebrovascular events (MACCE) rate and repeated target vessels revascularization (TVR) rate were evaluated by Kaplan-Meier curve and log-rank test.

Results: Mean age was 66.3 ± 12.0 years and 83.8% of patients were males. Mean SYNTAX score was 28,22 ± 7 (mean SYNTAX score in patients with Left main involved 33,5 ± 4,5). Mean EuroSCORE II was 4,05 ± 1,83. PCI was performed in all patients (n=70), in 52 pts (75,2%) before MIDCAB and in 24,8% of cases after surgery (interval 2,2 ± 1,3 months). In 12 patients (18,6%) Left Main was involved and MIDCAB was performed prior to PCI. No intra-operative or in-hospital deaths were reported. At follow-up one cardiac death for acute inferior myocardial infarction occurred. Two patients with Left Main needed a repeated non-LAD revascularization: one case for an acute myocardial infarction and the other due to recurrent angina with in-stent restenosis at angiography. At 25 ± 13 months follow-up the overall population freedom from MACCEs rate was 82,6% (CI: 79,5% to 85,7%) and the freedom from TVRs rate was 86,1% (CI: 82,9% to 89,3%). Despite the rate of MACCE and TVR was higher in patients with intermediate and high coronary risk than in patients with SYNTAX score ≤ 22, however such difference was not statistically significant ($p > 0,05$).

Conclusions: Hybrid Coronary Revascularization is a viable option to perform a minimally invasive functionally complete revascularization in high risk patient that can't undergo conventional revascularization. However this strategy has better results when performed on patients with a SYNTAX score ≤ 22. In our experience patients with Left Main HCR had a good outcome at the end of revascularization, although being burdened by an high TVR rate.

Other

CRT-58

Hybrid Coronary Revascularization Combining Off-pump Left Internal Mammmary Grafting And Percutaneous Coronary Intervention

Leif Thuesen, Ivy I Modrau, Per Hostrup Nielsen, Bøtker E Hans, Ewald H Christiansen, Lars R Krusell, Anne K Kaltoft, Michael Maeng, Christian J Tørkelsen, Steen D Kristensen, Jens F Lassen
Aarhus University Hospital, Aarhus N, Denmark

Aims: To assess procedural feasibility and early safety of hybrid coronary revascularization, combining off-pump left internal mammmary artery grafting to the left descendent coronary artery (LAD) through an inferior J-hemisternotomy (JOPCAB) and percutaneous coronary intervention (PCI) of non-LAD lesions.

Methods and Results: A total of 100 consecutive patients with multivessel coronary artery disease involving LAD were included in this prospective registry. JOPCAB was performed prior to PCI in 89 (89%) patients, and PCI was scheduled prior to surgery in 11 (11%) patients with total occlusion of a non-LAD artery. Two of these patients were