and 24 hours after the procedure. ST resolution was estimated at 90 minutes in the worst lead.

RESULTS 82 patients (70 males, 12 females) with a mean age of 56,9 ± 12,7 years were evaluated. The results showed significant reduction in both Qtc (mean 460.81 ± 26.17 ms vs 439.19 ± 18.43 ms ; p < 0,001) and Qtd (mean 60.68 ± 7.57 ms vs 35.78 ± 10.25 ms; p < 0,001) before and 24 hours after primary PCI while no significant difference was noticed in the Qtc (460.81 ± 26.17 vs 454.39 ± 35.89 ; p = 0.19) and Qtd (60.68 ± 7.57 vs 59.17 ± 7.54; p = 0.20) before and 90 minutes after the procedure.

Preprocedural QTd values were similar in patients with and without ST resolution (67 ± 5.77 vs 62 ± 7.53; p = 0.10). 24h after PPCI QTd decreased only in patients with ST resolution (34.61 ± 9.04 vs 58.5 ± 4.12; p <0.001). Multivariate analysis showed that ST resolution was an independent predictor of QTd after successful recanalization (standardized regression coefficient = -0.684; p = 0.004).

CONCLUSIONS In addition to a successful opening of the culprit artery, myocardial reperfusion must be achieved to improve electrical stability and reduce repolarization heterogeneity. Recovery of myocardial electrical homogeneity is not immediate and begins 24 hours after revascularization as assessed by QTc and QTd.

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The Impact of Bifucation Lesion in Acute Myocardial Infarction Undergoing Percutaneous Coronary Intervention Two Years Clinical Outcomes

Ji Young Park,[1] Seung Woon Rha,[2] ByoungGeol Choi,[2] Se Yeon Choi,[2] Eun-Gyu Lee,[3] Yung-Kyun Noh[4]
[1]Eulji Generla Hospital, Seoul, Korea, Republic of; [2]Korea University Guro Hospital, Seoul, Korea, Republic of; [3]Andong Sungso Hospital, Seoul, Korea, Republic of; [4]Korea Advanced Institute of Science and Technology, Daejeon, Korea, Republic of

BACKGROUND Bifurcation (BF) lesions remain a challenging lesion and often associated with lower success rates. The aim of this study is to evaluate the impact BF intervention in acute myocardial infarction (AMI) on the angiographic and clinical outcomes of Asian population.

METHODS A total of 903 patients (pts) were underwent percutaneous coronary intervention (PCI) for AMI between January 2004 and April 2009. Patients were divided into two groups according to presence of a BF lesion in the infarct-related artery: BF group (n= 332) and non BF group (n=571). BF lesions were defined if a side branch (SB) diameter was ≥2.0 mm.

RESULTS BF group had more male gender, higher incidence of non ST elevation MI(NSTEMI, 51.5% vs. 60.4%, p=0.01), higher incidences of culprit lesion in left anterior descending artery, left circumflex artery, and left main as compared with non BF group. However, the level of peak values of cardiac enzyme and left ventricular ejection (LVEF) were similar between the two groups. The six months angiographic outcomes and the cumulative clinical outcomes up to two years including total death, cardiac death, MI, and major adverse cardiac events (MACE) were similar between the two groups. However, BF group had higher incidence of target lesion revascularization (TLR), target vessel revascularization (TVR) and TVR-MACEs as compared with non BF group (Table).

CONCLUSION Despite BF intervention in AMI is challenging, the six months angiographic outcomes and 2 years clinical outcomes were similar between the two groups. However, BF intervention in AMI had higher incidence of repeat revascularization.

Cumulative clinical outcomes up to 24 months

Variable, n (%)	Bifurcation (N=332)	Non BF (N=571)	P value
Total Death (TD)	24 (9.6)	49 (11.0)	0.608
Cardiac death (CD)	22 (8.8)	35 (7.9)	0.774
Recurrent MI	13 (5.2)	13 (2.9)	0.146
STEMI	9 (3.6)	9 (2.0)	0.221
Revascularization	57(22.8)	63 (14.2)	0.005
TLR (target lesion revascularization)	36 (14.4)	29 (6.5)	0.001
TVR(target vessel revascularization)	41 (16.4)	40 (9.0)	0.004
TLR MACE (CD+STEMI+TLR)	57 (22.8)	63 (14.2)	0.005
All MACE (TD +MI +TLR+TVR)	66 (26.4)	97 (21.8)	0.192

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Combination Of Thrombus Aspiration, High-dose Statin, Adenosine And Platelet Membrane Glycoprotein IIb/IIIa Receptor Antagonist Reduce The Incidence Of No-reflow After Primary Percutaneous Coronary Intervention In Patients With St-segment Elevation Acute Myocardial Infarction

Shanshan Zhou, Yundai Chen
The PLA General Hospital, Beijing, China

BACKGROUND Primary percutaneous coronary intervention (pPCI) is currently the most effective treatment strategy in ST-segment elevation acute myocardial infarction (STEMI). A considerable number of patients, however, develop no-reflow phenomenon during pPCI. Compared to similar patients with adequate reflow, those with the no-reflow phenomenon have a higher incidence of death, myocardial infarction and heart failure. We have established a risk prediction model of no-reflow in our previous studies, through which we were able to find out patients at high risk of no-reflow.

METHOD A total of 1217 patients were admitted to our hospital during the enrolment for AMI; Patients with high risk of no-reflow (no-flow score ≥ 10, by using a no-flow risk prediction model) were randomly divided into control group and combination therapy group. Patients in control group received conventional treatment, while patients in combination therapy group received high-dose (80mg) atorvastatin pre-treatment, intracoronary administration of adenosine (140μg/min/kg) during PCI procedure, platelet membrane glycoprotein IIb/IIIa receptor antagonist (tirofiban, 10μg/kg bolus followed by 0.15μg/kg/min) and thrombus aspiration. Myocardial contrast echocardiography (MCE) was performed to assess the myocardial perfusion 72 hours after PCI. Major adverse cardiac events (MACE) were followed up for six months.

RESULTS A total of 621 patients were enrolled, among which 216(34.8%) high risk patients of no-reflow were selected by no-reflow risk prediction model. Patient demographics, angiography and procedural data examined in different group had no significantly different. No-reflow occurred in 11 cases (11/405, 2.7%) in low risk patients, 38 cases (38/108, 35.2%) in control group and 3 cases (2.8%) in combination therapy group. MCE at 72 hours after PCI procedure suggested a higher A × β value in combination therapy group than that of control group (Figure 3, 4). Six months clinical follow-up was obtained in 552 patients. Events rates are presented in Table 3. There were 6(6.3%) events (1 death, 2 non-fatal MIs and 3 revascularizations) in combination therapy group, significantly lower than 12(13.2%) events (4 deaths, 3 non-fatal MIs and 5 revascularizations) in control group.

CONCLUSION Our study discovered that using no-flow risk prediction model to screen AMI patients who had been suffered with high risk of no-reflow, and pretreated them with combination treatment could significantly lower the incidence of no-reflow, and further improved the prognosis.

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Staged versus Multi-vessel Revascularization in Primary Percutaneous Coronary Intervention for Acute ST- segment Elevation Myocardial Infarction Based on Peri-procedural Success Rate: A Pilot Study

Marwan Saad,[1] Ahmed Rashed,[2] Mohamed A. El-Haddad,[3] Wael El-Kilany,[4] Bassem Wadee,[4] Ahmed Nassar[4]
[1]Seton Hall University School of Health and Medical Sciences, Trinitas Regional Medical Center, Elizabeth, NJ; [2]Wayne State University, Detroit Medical Center, Detroit, MI; [3]University of Vermont Medical Center, Burlington, VT; [4]Ain Shams University, Cairo, Egypt

BACKGROUND Revascularization of culprit vessel is the goal of primary percutaneous coronary intervention (PCI) in patients with acute ST elevation myocardial infarction (STEMI) and multivessel disease (MVD) without hemodynamic compromise. Although concurrent revascularization of significant non-culprit lesions during index procedure may reduce infarct size and health care costs; however its safety and feasibility is still debatable. We compare short and long term outcome of Staged versus Multivessel primary PCI in hemodynamically stable STEMI patients with MVD.

METHODS A single-center, open label, randomized prospective study including 50 patients with acute STEMI and one or more significant non-culprit lesions of either type A or B (high peri-procedural revascularization success rate). Patients were randomized to either culprit lesion PCI during index procedure followed by PCI to other significant lesions in a later session within 60 days (Staged revascularization group, SR) or multi-vessel revascularization during index procedure (MVR). Primary outcomes were composite of death, MI requiring hospitalization (excluding periprocedural MI), target or non-target vessel revascularization (PCI or coronary artery bypass grafting), and decreased renal function 3-5 days following administration of radiographic contrast dye. Patients were followed over a period of 12 months.

RESULTS Both groups were balanced as regards baseline clinical and angiographic criteria. No significant difference between both groups in number of lesions treated (p=0.718) or number of stents used (p=0.908). Fluoroscopy time was longer in MVR (p<0.001). Similarly, amount of contrast used was higher in MVR group (p=0.011). Similar rates of major adverse cardiac events at one year were observed in both groups (22.8% and 25% in MVR and SR group respectively, p=0.428). Target vessel revascularization was also similar (9.1% in MVR and 8.3% in SR group, p=0.927). In spite of increased amount of contrast used in MVR group, there was no significant decrease in kidney function after 3-5 days compared to SR group (p=0.729).

CONCLUSION We may conclude from this pilot study that multivessel intervention during primary PCI is feasible and safe compared to a staged PCI approach when non-culprit lesions have high rate of peri-procedural success. To our knowledge, this is the first pilot trial in literature that suggest using lesion criteria and rate of peri-procedural success to decide about the appropriate approach during primary PCI for patients with acute STEMI and MVD.