also secondary prevention of CAD. The intervention strategies have seen huge flourishment. The percentage of PCI increased significantly, but still thrombolysis is the primary reperfusion modality. That shows the need for developing our insurance system to cover a broader spectrum with more services.

CRT-100.13

Bioabsorbable Coronary Artery Stents: Patient Follow-up After Two Years Of Treatment

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BACKGROUND Bioabsorbable stents - bioabsorbable vascular scaffolds (BVS) are a relatively new technology, which has many upsides when comparing it to metallic stents. After doing its function (revascularization) it also repairs the wall of the artery and then absorbs. It basically overcomes all of the downsides, which come from using metallic stents. This study was done to evaluate results and complications of one year treatment and also the need of revascularization for patients that have been treated with BVS.

METHODS Data of patients, who have been treated with BVS stents is stored and analyzed using retrospective survey. There were 46 consecutive patients, who have suffered from ischemic heart disease in our survey. First of all, risk factors of our patients were collected (diabetes, hypertension, smoking). Coronary artery angiography and stenting with bioabsorbable stents were performed on all of these patients. Patients were observed while still in hospital, after six months, after one year and after two years after discharge from the hospital in case of complications - major adverse cardiac events (MACE - death, thrombosis, myocardial infarction, stroke). Also, we evaluated length of hospitalization and the need for repeated revascularization.

RESULTS Age mean of patients which participated in the study was 58 years of which 26 were males and 20 were females. More than half (73,9%) of participants had stable angina pectoris with one vessel disease (47.8%), two vessel disease (24%), three vessel disease (28.7%). To determine the complexity of coronary artery disease we used the Syntax score and 47.8% of study participants had a score of more than 10 points. Risk factors - such as arterial hypertension (95,6%) , diabetes (4,34%) , smoking (15,2%) , dyslipidemia (76%) were also evaluated. The study analyzed the most suitable technique aspects : 47.8% of patients had a long 28 x 3.5 mm stent. During the one year period there were no complications whatsoever. During the second year - there were 3 myocardial infarctions and 1 revascularization. The mean of hospitalization time was 6.25 ± 2.58 days.

CONCLUSION Patients of this study have had none of the MACE complications during one year period. Also there was no need for repeated revascularization for patients who had been treated using bioabsorbable stents during that year. During the second year, 4 patients had complications. This study suggests that this technology might be more effective than the traditional metallic stents, but longer follow up is needed.

CRT-100.14

Intravascular Ultrasound Is the Best Tool for the Diagnosis of Spontaneous Coronary Dissection Leading to STEMI

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BACKGROUND Spontaneous coronary artery dissection is an underdiagnosed condition The aim of our report is to highlight the fundamental role of intravascular ultrasound(IVUS) in the management of STEMI due to spontaneous coronary dissection.

METHOD AND RESULTS 12 consecutive patients, referred to our cathlab for primary angioplasty, were managed with IVUS because of a suspicion of spontaneous coronary artery dissection. IVUS was done both for a diagnostic purpose and to guide the implantation of one or more stents. There were 8 female patients with a mean age of 40 years (28-44), with LAD involved for 6 of them, and right coronary artery in two of them ; and 4 male patients with a mean age of 34 years (20-40), one with LAD l, 2 left circumflex artery l, and 1 right coronary occlusion. All patients had ongoing STEMI at presentation and IVUS was conducted for diagnostic purpose in the setting of a totally occluded artery in 7 patients and an artery with TIMI flow 1 in 5 patients. in addition IVUS will show the incorrect position of the wire in the false channel in 5 patients and will guide the replacement of the wire in the true lumen in these patients. All patients were successfully treated with one or multiple stents under IVUS guidance, allowing us to cover the arterial dissection while preserving all collaterals. The clinical course of these patients was uneventful and the long-term outcome is excellent.

CONCLUSION STEMI due to spontaneous coronary dissection is a relatively rare and underdiagnosed condition, especially with an occluded artery, if IVUS is not used. The diagnosis is very difficult In addition to aid diagnosis, IVUS allows a safe stenting , since it assesses the proper position of the wire in the true lumen.

CRT-100.21

Comparison Between Intracoronary and Intravenous Eptifibatide Bolus Injection Regimens During Primary PCI in Patients Presenting With Anterior STEMI

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BACKGROUND Eptifibatide achieves high local concentration via direct intracoronary injection as it promotes clot disaggregation, but it remains unclear if it is of superior benefit than the routine intravenous administration.

AIM The current study aimed to examine the safety and efficacy of intracoronary versus intravenous bolus regimen dose of eptifibatide during primary PCI.

METHODS Prospective, controlled, randomized study enrolled 100 patients with acute anterior STEMI eligible for primary PCI equally divided into 2 groups (group A received bolus intracoronary eptifibatide and group B received it intravenous) followed by 12h continuous IV infusion. Predictors of myocardial salvage in the form of TIMI flow grade III, myocardial blush grade 3, ST segment resolution and left ventricular systolic function were evaluated with short term follow up for 1 month.

RESULTS Mean age of the study population was 50.95±8.45years, there was statistically insignificant difference between both groups regarding baseline characteristics regarding age ($p=0.062$), gender ($p=0.488$) and coronary artery disease risk factors ($p>0.05$), time from onset of pain to admission ($p=0.86$) or door to balloon ($p=0.12$). Group A achieved statistically significant better myocardial blush grade 3 (42% versus 10%, $p=0.005$), ejection faction 30 days after PPCI (46.11±7.81, versus 40.88±6.26, $p=0.005$) but statistically insignificant TIMI flow grade III ($p=0.29$) and ST resolution ($p=0.34$). Incidence of in hospital compilations and 30 days after discharge was statistically insignificant ($p>0.05$).

CONCLUSION Regimen of intracoronary bolus eptifibatide achieved better myocardial salvage predictors and was as safe as intravenous bolus during PPCI and at short term follow-up.

CRT-100.22

Comparative Outcomes of Angiotensin-Converting Enzyme Inhibitor and Angiotensin Receptor Blocker in Diabetic Hypertensive Acute Myocardial Infarction Patients: Results from the Korea Acute Myocardial Infarction Registry (KAMIR)

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BACKGROUND Angiotensin-Converting Enzyme (ACE) Inhibitors and Angiotensin Receptor Blockers (ARB) are known to have similar effects on cardiovascular outcomes including total mortality in head-to-head trials, and ACE inhibitors, in particular, are recommended for diabetic patients. However, data is limited whether there are similar effect on major clinical outcomes between ACEI and ARB treatments in diabetic hypertensive acute myocardial infarction (AMI) patients (pts).

METHODS A total of 6,377 diabetic hypertensive pts were selected from the prospective multicenter AMI registry in Korea, Korean Acute Myocardial Infarction Registry (KAMIR), and divided into two groups on the basis of discharge prescription: ACEI (n=3,882) and ARB (n=2,495). Individual and major adverse cardiac events (MACE) were compared between the two groups for 2 years.

RESULTS During the 2-year follow-up, the ACEI group demonstrated significantly better outcomes across a majority of the clinical outcomes including total death, cardiac death, myocardial infarction, repeat revascularization, target vessel revascularization, and total MACE as indicated in the table below.

CONCLUSION The results of this study clearly shows that ACE inhibitors should be recommended over ARB with higher priority when treating diabetic hypertensive AMI patients, particularly in a series of Korean population.

Table. Cumulative Incidence of Clinical Outcomes in Diabetic Hypertensive AMI Patients at 2 Years

Variables, %	ACEI (n=3,882)	ARB (n=2,495)	p-Value
Total death	4.4%	6.4%	0.000
Cardiac death	3.1%	4.2%	0.008
Myocardial infarction	2.0%	2.8%	0.006
Repeat revascularization	4.1%	5.7%	0.001
Target lesion (CTO vessel)	1.4%	1.9%	0.098
Target vessel (CTO vessel)	2.5%	3.8%	0.001
Non-target vessel (Non-CTO vessel)	1.6%	1.9%	0.277
Total MACE	9.9%	12.8%	0.000

CRT-100.23

Comparison of Dual Drug-eluting Stent (cilotax) and Everolimus-eluting Stents in Patients With ST-Elevation Myocardial Infarction (STEMI): 3-years Clinical Outcomes

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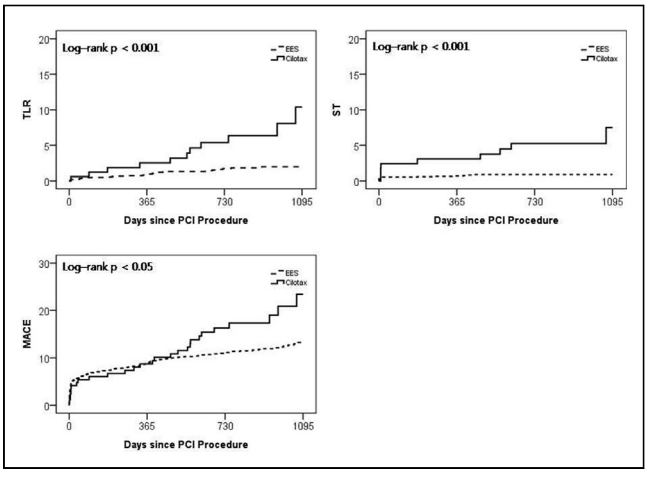
BACKGROUND Cilotax stent is a dual drug-eluting stent (DES) designed to combination of paclitaxel and cilostazol for reducing the thrombosis using antiplatelet activity of the cilostazol. We evaluate the 3-years clinical outcomesbetween CILOTAX and everolimus-eluting stents (EES) in patients with STEMI.

METHODS A total of 2799 consecutive patients (pts) underwent percutaneous coronary intervention (PCI) due to STEMI using Cilotax (n=171) or EES (n=2628)were enrolled and 36-month clinical outcomes were compared between the two groups.

RESULTS The baseline clinical and lesion characteristics were similar between the two groups except the EES group was older than Cilotax group (63 ± 12.4 vs. 59 ± 12.8, p < 0.001).The baseline lesion characteristics were similar between the two groups except the multivessel disease was more frequent in Cilotax group (44.9% vs. 56.7%, p < 0.05) whereas lesion length of the EES group was longer than Cilotax group (27.0 ± 11.3 mm vs. 20.1 ± 7.8 mm, p < 0.001). During 3-year follow-up, Cilotax group have higher incidence rates of target lesion revascularization (TLR), major adverse cardiac event (MACE) and stent thrombosis (ST) more than EES group (figure). Following adjustment for confounders, CILOTAX group was significantly associated with TLR (HR 3.49, 95% CI 1.75 to 6.98; p < 0.001), ST (HR 5.29, 95% CI 2.38 to 11.76; p < 0.001) and MACE (HR 1.64, 95% CI 1.11 to 1.43; p < 0.05) compare with EES group in the treatment of STEMI.

CONCLUSION In the treatment of STEMI, patients treated with EES rather than CILOTAX experienced significantly improved event-free survival including MACE during 3-year follow-up period.



CRT-100.24

Impella Versus Intraaortic Balloon Pump in Acute Myocardial Infarction Patients Complicated by Cardiogenic Shock

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BACKGROUND Acute myocardial infarction (AMI) complicated by cardiogenic shock (CS) is associated with high in-hospital mortality and morbidity. Our goal is to check safety and efficacy of Impella (pLVAD) versus intra-aortic balloon pump (IABP) in the management of these patients.

METHODS Data was prospectively collected for total of 36,228 patients from January 2011-April 2016 from 5 hospitals in New York City. We included those patients having AMI complicated by CS (n=177). Two groups were made for each device therapy. The primary end point was in-hospital mortality and secondary outcomes were myocardial infarction, CS, stroke, heart failure, RBC transfusion, bleeding within 72 hours and new requirement of dialysis. Univariate and multivariate analysis were performed using IBM SPSS 22.0.

RESULTS Patients in the IABP group had a higher mean age while patients in the Impella group had more heart failure presentation. Patients in the Impella group had significantly lower ejection fraction. After performing adjusted analysis, bleeding within 72 hours was significantly higher in the IABP cohort. No other outcome differences were noted between the groups.

CONCLUSION In patients with AMI complicated by CS, patients with hemodynamic support with Impella prior to PCI are associated with improved survival and significantly less bleeding. The hemodynamic effect of unloading the left ventricle is a significant advantage of pLVAD.

Table 1: Unadjusted analysis

Variable Name	IABP Support (N=91)	Impella Support (N=86)	P Value
Age (years)	67.23±12.23	62.96±13.61	0.034
BMI (kg/m²)	27.22±4.55	27.64±5.85	0.600
Smoker (n)	19 (20.87%)	25 (29.06%)	0.210
Hypertension (n)	64 (70.32%)	67 (77.90%)	0.253
Dyslipidemia (n)	58 (63.73%)	44 (51.16%)	0.092
Prior MI (n)	21 (23.07%)	18 (20.93%)	0.732
Prior Heart Failure (n)	17 (18.68%)	34 (39.53%)	0.002
Prior PCI (n)	24 (26.37%)	25 (29.06%)	0.691
Prior CABG (n)	9 (9.89%)	12 (13.95%)	0.406
Dialysis (n)	1 (1.09%)	3 (3.48%)	0.288
Cerebrovascular Disease (n)	11 (12.08%)	1 (1.16%)	0.003
Peripheralvascular Disease (n)	6 (6.59%)	6 (6.97%)	0.887
Chronic Lung Disease (n)	10 (10.98%)	4 (4.65%)	0.131
Diabetes Mellitus (n)	31 (34.06%)	33 (38.37%)	0.554
Cardiomyopathy (n)	31 (34.06%)	22 (25.58%)	0.239
Procedural Details			
LVEF (%)	35.65±15.65	21.46±11.12	0.000
Lesion Length (mm)	16.79±6.95	15.89±3.78	0.425
Lesion Diameter (mm)	2.64±0.54	2.51±0.43	0.170
In-Hospital Outcomes			
Myocardial Infarction	0 (0.00%)	6 (6.97%)	0.017
Cardiogenic Shock	11 (12.08%)	19 (22.09%)	0.176
Heart Failure	12 (13.18%)	11 (12.79%)	0.659
Stroke	0 (0.00%)	1 (1.16%)	0.339
New Requirement For Dialysis	5 (5.49%)	1 (1.16%)	0.077
RBC Transfusion	31(34.06%)	17 (19.76%)	0.007
Bleeding Within 72 Hours	24 (26.37%)	4 (4.65%)	0.000
Death On Discharge	24 (26.37%)	30 (34.88%)	0.202

Table 2 : Adjusted Analysis

Variable name	P value
Myocardial Infarction	0.127
Cardiogenic Shock	0.171
Heart Failure	0.536
Stroke	0.388
New Requirement For Dialysis	0.406
RBC Transfusion	0.312
Bleeding Within 72 Hours	0.002
Death On Discharge	0.789