

also secondary prevention of CAD. The intervention strategies have seen huge flourishing. 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 I, 2 left circumflex artery I, 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 fraction 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 complications 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.