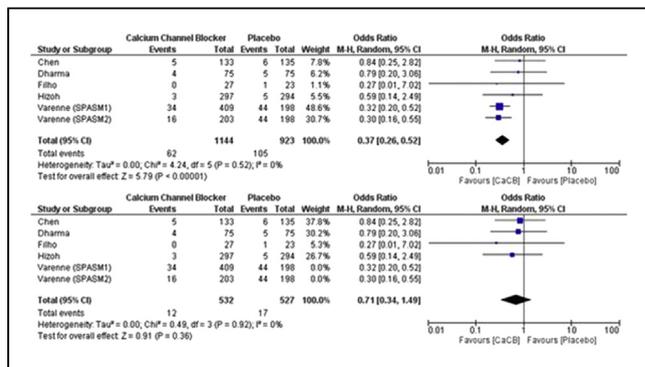


analysis. CCB administration resulted in significant decrease in the rate of RAS (OR 0.37 [0.26-.52], $P < 0.0001$). The outcomes remained positive with fixed effects model analysis. There was no difference between both interventions after running sensitivity analysis.

CONCLUSION Calcium channel blockers help reducing radial artery spasm in radial interventions. Large studies are needed to form a more specific consensus of dosage and potential side effects of these medications.



CRT-200.43
Utility of Coronary Sinus Filling Time in Prediction of Outcome After Left Anterior Descending Coronary Artery Stenting
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OBJECTIVE Myocardial reperfusion is the main issue for percutaneous coronary intervention (PCI). We sought to evaluate the usefulness of coronary sinus filling time (CSFT) to assess outcome after PCI for left anterior descending coronary artery (LAD).

METHODS We assessed the CSFT after performing successful PCI for patients with single LAD significant stenosis. Patients were classified into two groups (unfavorable and favorable) based on the Clinical and echocardiographic follow-up along 6 months following PCI. Coronary sinus was visualized in appropriate views after PCI and CSFT in seconds was derived from frame count. Thrombolysis in Myocardial Infarction (TIMI) flow grade and corrected TIMI (cTIMI) frame count were assessed.

RESULTS There was 36 patients in unfavorable group and 52 in favotable outcome group. Among the unfavorable group 69.4% were females against 44.2% in the favorable group. Comparing favorable group with unfavorable group, the were 32 patients (91.6%) had typical angina versus 11 patients (21%), E/E' was 18+2.1 versus 7+1.9 ($P < 0.0001$), EF% was 32.3+6.1% versus 59.5+5.7% ($P < 0.001$), and instent stenosis was 7 (19.4%) vesus 2 (3.8%); $P < 0.003$. Mean CSFT was 6.21 ± 0.45 s in unfavorable group versus 3.32 ± 0.74 s in the favorable group ($P < 0.001$). No significant differences were found after PCI between both groups with respect to cTIMI frame count ($p > 0.05$). CSRT of >5.0s was the best cut-of value predicting unfavorable outcome after PCI for LAD.

CONCLUSION CSFT is a simple method to predict outcome of PCI. CSFT was significantly delayed in patients with unfavorable outcome. CSFT may be used as a simple and quantitative test in percutaneous coronary intervention to select patients and predict outcome after PCI.

CRT-200.44
Bail-Out SYNERGY Stent Implantation in Complex Coronary Artery Lesions
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BACKGROUND Compared to first generation drug eluting stents (DES), second generation DES show a significant improvement in various clinical endpoints. The evolution of newer coronary stent systems has now progressed towards design modifications with improved interventional Performance and clinical outcomes. The SYNERGY™ stent (Boston Scientific Corp., Natick, Massachusetts) represents a new DES generation with reduced strut thickness

and only abluminal polymer coating aiming at improved deliverability.

METHODS In this single center study, patients were included upon receiving an attempted SYNERGY™ stent implantation in the time from February 2013 to June 2015 as a bail-out strategy after failed implantation of a second generation DES (Promus Element™, Boston Scientific, Natick, Massachusetts, Xience Prime™, Abbott Vascular, Santa Clara, California, Resolute Integrity™, Medtronic, Santa Rosa, California) in complex coronary lesions, which were categorized through ACC/AHA classification and SYNTAX Score.

RESULTS The study population consisted of 97 patients with attempted bail-out SYNERGY™ stent implantation, which was successful in 89 (91.8%) cases. ACC/AHA classification showed mostly complex target coronary lesions: A 1.0%, B1 1.0%, B2 17.5%, C1 22.7%, C2 57.7%. The SYNTAX Score classified the patients into low (9.1%), intermediate (23.4%) and high (67.5%) risk categories.

CONCLUSION The SYNERGY™ stent has demonstrated remarkable deliverability to different complex coronary artery lesion subsets, highlighting an enhanced interventional stent performance and its usefulness as a drug-eluting bail-out stent.

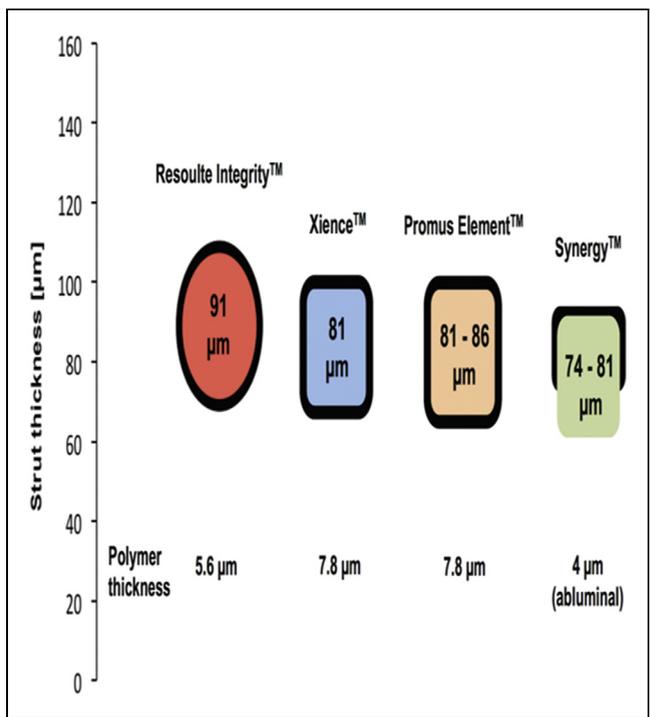


Figure 1. Stent strut thickness of SYNERGY™ stent in comparison to drug-eluting stents used in this study. The black coloured contour marks the polymer coating.

CRT-200.45
Same Day Discharge PTCA: Beyond Actual Statements
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BACKGROUND In 2009 the Society for Cardiac Andigraphy and Interventions (SCAI) defines the lenght of stay (LOS) after coronary angioplasty (PCI), and which could be discharged the same day. Today, same day discharge PCI remains a discussion topic and we don't know clearly whether these criteria could be reconsidered and extended to a higher risk population.

OBJECTIVE Evaluate clinical and procedure results of patients (pts) in our formal same day discharge (SDD) PCI program, whether meeting or not the SCAI criteria.

METHODS In September 2009 we started a formal program of SDD PCI. Until November 2015, 1696 PCI were performed, 867 (51%) of whom where elective. Of them, 232 (27%) met our criteria for SDD PCI. Those patients meeting SCAI criteria for SDD conformed group A (n=54; 23%). Patients not meeting SCAI criteria conformed group B (n=178;

67%). These group also achieved our SDD program standards (inclusion: unstable angina with negative biomarkers; PCI with stent regardless of length or treated vessels; radial access; procedure ended before 4 pm; EF ≥ 30%; 4 hr monitoring post PCI. Exclusion: treatment of only patent vessel; unprotected left main; CPR; suboptimal result; persistent angina post PCI; major vascular access complication).

We evaluated the following cardiovascular and vascular access events within 24 hours after PCI: cardiovascular death, urgent CABG, myocardial infarction, re intervention, pseudoaneurysm, major bleeding, AV fistula, symptomatic radial artery occlusion).

Baseline characteristics in Group A vs Group B n (%) respectively: Age 61±9 vs 61±4; male 47(87) vs 162(91); CKD 0 vs 3(2); PAD 0 vs 9(5) p=0.09; COPD 0 vs 6(3); impaired left ventricular function 0 vs 24(13) p=0.004; stable angina 13(24) vs 27(15); silent ischemia 41(76) vs 88(49) p=0.001; unstable angina 0 vs 63(35) p=0.001; single vessel treated 45(83) vs 86(48) p=0.001; multivessel treatment 0 vs 58(33) p=0.001; 6 Fr 52(96) vs 167(94); 8 Fr 2(4) vs 5(3); at least one DES 38(70) vs 152(85) p=0.01; length of stent ≥ 28 mm 0 vs 134(75) p=0.001.

RESULTS Group A vs Group B n (%) respectively: technical success 54(100) vs 178(100). There were no in hospital deaths, early coronary occlusion or major vascular complications in any of the groups. There were no extra hospital deaths during follow up (average 23±19 vs 25±20). Re intervention rates were 5(9) vs 8(4).

CONCLUSION The clinical and procedure outcomes were similar for both groups. Our results are promising to go beyond the recommendations suggested by the SCAI. A more robust study to confirm these findings will be necessary.

CRT-200.46

Impact of Coronary Calcification on Clinical Outcomes and Health Care Related Costs Among Elderly Patients Undergoing Percutaneous Coronary Intervention

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BACKGROUND Percutaneous coronary intervention (PCI) of calcified lesions (CL) often require additional resource utilization and lead to more frequent procedural complications. There is little data regarding the clinical outcomes and economic considerations for patients (pts) undergoing PCI of CL in current practice.

METHODS Using Medicare claims data, 235,381 PCI pts were identified between 10/2011 and 12/2012, of which 2,276 pts were coded as having CL (based on the specific ICD-9 code 414.4). 4:1 propensity matching was used to adjust for differences in baseline characteristics for pts with and without CL. Clinical outcomes and health care costs through 1 year of follow-up were compared between the groups.

RESULTS The analytic cohort consisted of 11,380 pts (2,276 CL, 9,104 non-CL). During the index hospitalization, there were no differences in death or length of hospital stay; however, index hospitalization costs were higher for pts with CL (\$25,238 vs. \$22,668; p < 0.001). Over 1 year of follow-up, there were no differences in rates of death or myocardial infarction, but there was a significantly higher rate of repeat revascularization (13.6 vs. 10.7 procedures per 100 pts; p = 0.020) and higher revascularization costs (\$3,551 vs. \$2,577; p = 0.016) in the CL group. Overall, cumulative health-care related costs at 1 year were significantly higher in patients with CL (\$54,579 vs. \$49,833; p = 0.018).

CONCLUSION Among Medicare pts undergoing PCI, treatment of CL was associated with increased rates of repeat revascularization and approximately \$5000 higher medical costs over 1-year follow-up. These findings suggest that health-care related costs for pts undergoing PCI for CL are increased in both the short and long term and highlight the need for further studies to assess the clinical and economic value of specific treatment strategies for such pts.

Table: Clinical Outcomes and Health Care Related Costs at Discharge and 1 Year for Patients with and without Calcified Lesions treated with Percutaneous Coronary Intervention

	Calcified (n=2,276)	Non-Calcified (n=9,104)	Difference (95% C.I.)	P value
Clinical Outcomes (Events per 100 Patients)				
Death	9.4	9.7	n/a	0.657
Myocardial Infarction	27.2	24.9	n/a	0.415
Repeat Revascularization	13.6	10.7	n/a	0.020
PCI	11.7	9.3		0.037
CABG	1.9	1.3		0.152
Health Care Related Costs				
Index Hospitalization	\$25,236	\$22,668	2568 (1881 to 3256)	< 0.001
Repeat CV Hosp.				
With Revasc.	\$3,551	\$2,577	974 (175 to 1774)	0.016
Without Revasc.	\$6,211	\$7,226	-1015 (-2520 to 490)	0.186
Total	\$9,763	\$9,803	-40 (-1810 to 1729)	0.964
Non-CV Hosp.	\$5,842	\$5,291	893 (-1198 to 2301)	0.536
Outpatient Care	\$13,737	\$12,071	1666 (-681 to 4014)	0.164
Total Follow up Cost	\$29,343	\$27,165	2177 (-1639 to 5994)	0.263
Total 1-Year Cost (Index + Follow-Up)	\$54,579	\$49,833	4746 (790 to 8702)	0.018

CRT-200.47

Primary Angioplasty in Bifurcation Lesions: Comparison of a Complex vs Simple Strategy and Its Impact on Myocardial Reperfusion

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BACKGROUND It is not uncommon to find bifurcation lesions in a primary angioplasty (AP) in patients coursing an acute myocardial infarction with ST segment elevation (STEMI). Although the literature supports a simple strategy in patients with stable coronary heart disease and bifurcations, there is little evidence during the AP.

OBJECTIVE Evaluate the effectiveness and safety of AP in patients with bifurcation lesions in STEMI, comparing a simple strategy (one stent, 1 guide) vs a complex strategy (provisional stent (SP) and / or 2 stents technique).

METHODS An observational retrospective cohort analytic study. We searched all STEMI subjected to AP, between January 2012 and June 2014, in the catheterization laboratory of Dr. Sotero del Río Hospital and were selected patients with bifurcation lesions in the culprit vessel. We reviewed the clinical characteristics, peri- and post-procedural angiographic, and the presence of major adverse cardiac events (MACE; mortality, stroke, reinfarction, revascularization of the culprit vessel) and follow-up mortality. Final angiographic results were compared using a simple strategy (controls) vs complex (cases).

RESULTS Of a total of 853 patients with STEMI in the period analyzed, 125 (14.6%) had bifurcation lesions in the culprit vessel. Groups (32 cases, 93 controls) were comparable for baseline clinical and angiographic characteristics. In the group of cases was used more contrast (269 mL vs 213 mL; p < 0.05) and radiation (4342 vs 2432 mGy; p < 0.05). A better final microvascular flow in the main vessel epicardial measured by TIMI frame count (cTFC) in cases vs controls was obtained (20.8 vs 26.8, p < 0.05, cTFC <23 84% vs 49%, p < 0.05). When analyzing subgroups of complex strategy according to the technique of bifurcation (SP and 2 stents) vs the control group (CG), better cTFC was observed in both groups vs the GC (GC SP vs 21 +/- 5.8 vs 26.8 +/- 11.5; p < 0.05; 2 stents vs 20.1 +/- 5 GC vs 26.8 +/- 11.5 p < 0.05), finding no differences between subgroups of patients (SP stents vs 2 vs 21 +/- 5.8 +/- 20.1 5; p = 0.97). There were no differences in MACE (31.2% vs 28.7%; p = 0.83) or overall mortality (6.25 vs 6%; p = 0.2), with a mean of 2.4 years (13-44 months).