CONCLUSION The acute success of PCI is high (95.4%) in octo and nanogenerians with minimal complication rates (4%). So, PCI may be one of the preferred modalities of treatment in PCI suitable cases. However, many lesions (88%) required pre-dilatation due to calcific lesion or tighter stenosis.

CRT-200.10

Percutaneous Coronary Intervention In Patients With Ischemic Cardiomyopathy And Viable Myocardium: A Dobutamine Stress Echocardiography Study

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The treatment of patients with ischemic cardiomyopathy is still problematic.The choice of revascularization of these patients especially who have substantial viability is not widely implemented due to confusion about its benefit. This work aimed to evaluate prospectively the response of left ventricular function to low as well as high dose dobutamine in patients with ischemic cardiomyopathy showing substantial viability , with and without improved resting left ventricular ejection fraction after coronary angioplasty. Fifty patients with ischemic cardiomyopathy(LVEF≤40%) and substantial viability(≥2segments) underwent low and high dose dobutamine echocardiography before and three months after percutaneous coronary intervention . Patients were divided into group 1, patients with, and group 2, patients without significant improvement in resting LVEF (> 5% by echocardiography) after revascularization. The response of LVEF during dobutamine stress echocardiography was compared in these two groups. Patients were matched for baseline characteristics except for the history of myocardial infarction which was more in group 2.The CCS functional class for angina and the NYHA functional class for heart failure were both improved after PCI in both groups but with a remarkable improvement in group 1.Myocardial viability increased much more in group 1 than group2 after PCI (6.3 vs. 4 viable segments before and 6.8 vs. 4.4 viable segments respectively after, p< 0.01).This result has an impact on LVEF in both groups.Resting, low dose and high dose dobutamine ejection fractions in group 1 as compared to group 2 were : 34% vs. 31%, 46% vs. 41% and 34% vs. 32% respectively, p<0.001 before PCI while they were : 43% vs. 31%, 54% vs. 44% and 56% vs. 46% respectively, p<0.001 after PCI. So, the improvement in LVEF (≥5%)was only found in group 1 and not in group 2. In conclusion, assessment of resting LV function has been used as the yard stick to evaluate the success of coronary revascularization in patients with ischemic cardiomyopathy and viable myocardium. The findings in the present study are similar with previous studies results and they show that assessment of resting LVEF is still beneficial to measure the improvement in left ventricular function after percutaneous coronary intervention. The LV function was improved only in patients with improved resting LVEF and improved myocardial viability after PCI.

CRT-200.11

Can A Simple Prediction Model Applied At Admission Predict Readmission Risk In CABG Patients?

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BACKGROUND Reducing readmissions following hospitalization is a national priority. Identifying patients at high risk for readmission after coronary artery bypass graft surgery (CABG) early in a hospitalization would enable hospitals to enhance discharge planning.

METHODS We developed different models to predict 30-day inpatient readmission to our institution in patients who underwent CABG between January 2010 and April 2013. These models used data available: 1) at admission, 2) at discharge 3) from STS Registry data. We used logistic regression and assessed the discrimination of each model using the c-index. The models were validated with testing on a different patient cohort who underwent CABG between May 2013 and September 2015. Our cohort included 1277 CABG patients: 1,159 in the derivation cohort and 1,018 in the validation cohort.

RESULTS The discriminative ability of the admission model was reasonable (C-index of 0.673). The c-indices for the discharge and STS models were slightly better. (C-index of 0.700 and 0.714 respectively). Internal validation of the models showed a reasonable discriminative admission model with slight improvement with adding discharge and registry data (C-index of 0.641, 0.659 and 0.670 respectively). Similarly validation of the models on the validation cohort showed similar results (C-index of 0.573, 0.605 and 0.595 respectively).

CONCLUSION Risk prediction models based on data available early on admission are predictive for readmission risk. Adding registry data did not improved the performance of these models. These simplified models may be sufficient to identify patients at highest risk of readmission following coronary revascularization early in the hospitalization.

CRT-200.12

Influence of StentBoost Imaging Guided Percutaneous Coronary Intervention on Proper Stent Expansion

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BACKGROUND Successful stent implantation does not always mean optimal stent deployment and expansion in a sizable portion of patients, and hence subsequent stent thrombosis and restenosis.

OBJECTIVE We investigated whether StentBoost subtraction (SBS) imaging technique can help in proper stent visualization and assessment of adequate expansion and deployment compared to standard angiography (SA) and its usefulness in procedural success of percutaneous coronary intervention (PCI).

METHODS A total of 147 stents were studied following PCI using StentBoost subtraction (SBS) imaging technique compared to SA using Philips machine allura xper FD 10. SBS was acquired as a short digital cine run with deflated two dots balloon inside the studied stent (3-4 seconds) without contrast at 15 frames per seconds. We compared 3 parameters between both imaging techniques: 1-stent visibility classified into 3 grades poor, average and excellent. 2-Stent deployment classified also into 3 grades cannot be evaluated, improper deployment and proper deployment. 3-Usefulness of StentBoost in which StentBoost was considered useful if added more information and helped in proper evaluation and detection of stent under expansion than standard angiography.

RESULTS Using SA compared to SBS imaging stent visibility was poor in 57.1% of examined stents, average in 40.8% and excellent in 2% compared to 0%, 39.5% and 60.5% using SBS (P<0.001). 68 Stents (46.3%) VS. 0 could not be evaluated, 31 stents (21.1 %) VS. 43 (29.3%) showed improper deployment and 48 stents (32.7%) VS. 104 (70.7%) showed proper deployment (P<0.001). SBS was useful than SA in 73 stents (49.66%), 68 stents were evaluable by SBS not by SA and 5 stents showed improper deployed after using SBS.

CONCLUSION SBS imaging improved stent visibility which helped in accurate assessment of stent deployment and seemed useful in 50% of examined stents as compared to SA.

CRT-200.13

Can A Simple Prediction Model Applied At Admission Predict Readmission Risk In PCI Patients?

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BACKGROUND Reducing readmissions following hospitalization for percutaneous coronary intervention (PCI) is a national priority. Identifying patients at high risk for readmission early in a hospitalization would enable hospitals to target these individuals for enhanced discharge planning.

METHODS We developed 3 different models to predict 30-day inpatient readmission to our institution for patients who underwent PCI between January 2010 and April 2013. These models used data available: 1) at admission, 2) at discharge 3) from CathPCI Registry data. We used logistic regression and assessed the discrimination of each model using the c-index. The models were validated with testing on a different patient cohort who underwent PCI between May 2013 and September 2015.

RESULTS Our cohort included 6,717 PCI patients; 3,739 in the derivation cohort and 2,978 in the validation cohort. The discriminative ability of the admission model was good (C-index of 0.727). The c-indices for the discharge and cath PCI models were slightly better. (C-index of 0.751 and 0.752 respectively). Internal validation of the models showed a reasonable discriminative admission model with slight improvement with adding discharge and registry data (C-index of 0.720, 0.739 and 0.741 respectively). Similarly validation of the models on the validation cohort showed similar results (C-index of 0.703, 0.725 and 0.719 respectively).

CONCLUSION A risk prediction models based on data available at admission is predictive for readmission. Though adding data available at discharge did improve performance, simple models may be