

Baseline characteristics were group A and B respectively: mean age 59 ± 10.6 vs 61 ± 11.5 ; male 96(89) vs 94(92); diabetics 23(21) vs 19(19); prior PCI 13(12) vs 12(12); EF 55 ± 14 vs 51 ± 20 ; Killip class I 83(77) vs 80(78); IIb/IIIa inhibitors 14(13) vs 19(19); door to balloon time (min) 103 ± 56 vs 116 ± 63 ; two vessel disease 88(81) vs 68(67) $p=0.01$; three vessel disease 20(19) vs 33(32) $p=0.02$; LAD as infarct related artery (IRA) 46(43) vs 33(32); RCA IRA 43(40) vs 40(39); LCX IRA 19(18) vs 27(26); complete revascularization was done in index procedure in 60 pts, before hospital discharge in 40 pts and before 30 days in 8 pts; mm of stents 67 ± 25.5 vs 35.8 ± 22.4 ($p < 0.001$); all DES 45(42) vs 15(15) $p < 0.001$; thromboaspiration 14(13) vs 4(4) $p=0.01$; radial access 53(49) vs 13(13) $p < 0.001$; Rx time 20.9 ± 12.5 vs 17.7 ± 14.1 $p=0.08$; dye (cc) 299 ± 112.2 vs 240 ± 84.6 ($p < 0.001$).

RESULTS In hospital results for both A and B group: technical success 107(99) vs 99(97); clinical success 103(95) vs 97(95); cardiac death 1(1) vs 2(2); acute coronary occlusion 1(1) vs 0; subacute coronary occlusion 1(1) vs 0.

At follow up the combined of re infarction + death was 2(2) vs 14(14) $p=0.001$; re interventions 19(18) vs 31(30) $p=0.02$, with a 93% of follow up at 41 months.

CONCLUSION Incomplete revascularization showed an increased rate of the combined of death + re infarction and re intervention when compared to complete revascularization in patients with STEMI and MVD.

CRT-100.92

Role Of Tissue Doppler Echocardiography In Predicting The Severity Of Coronary Artery Disease In Patients With Stable Angina Pectoris



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INTRODUCTION Despite a decline in mortality attributed to coronary artery disease (CAD), its burden remains high and is the leading cause of heart failure. Early detection of CAD severity is essential to initiate treatment and improve prognosis.

AIM To determine how LV wall motion assessed by echocardiographic Tissue Doppler Imaging (TDI) is affected by increasing severity of CAD among patients with stable angina pectoris and preserved ejection fraction (EF).

METHODS Fifty five patients with chronic stable angina and normal EF who were referred to our hospital to do TDI after performing coronary angiography are included. Patients without significant stenosis constituted the control group and patients with significant stenosis were divided into three groups according to number of vessel affected. Regional longitudinal peak systolic, early, and late diastolic myocardial velocities were measured at six mitral annular sites and averaged to provide global estimates.

RESULTS Patients with significant coronary disease were matched with the control group. In patients with one-, two- and three-vessel disease, the global systolic function decreased with increased severity of CAD (p -value 0.033, 0.005, 0.000 respectively). In one- and two-vessel disease, global early diastolic velocity decreased significantly (p -value 0.034, 0.006 respectively), but only in patients with one-vessel disease, the global late diastolic performance increased with a significant reduction of e'/a' ratio (p -value 0.002).

CONCLUSION Color TDI performed at rest in patients with stable angina and preserved EF reveals both diastolic and systolic dysfunction and the nature of the dysfunction depends on the extent of the CAD.

CRT-100.95

Conformability and Wall Shear Stress Assessment Following Deployment of Resolute Integrity Zotarolimus-Eluting Stent and the XIENCE Xpedition Everolimus-Eluting Stent in Angulated Vessels: An Interim Analysis of the SHEAR-STENT Randomized Controlled Study



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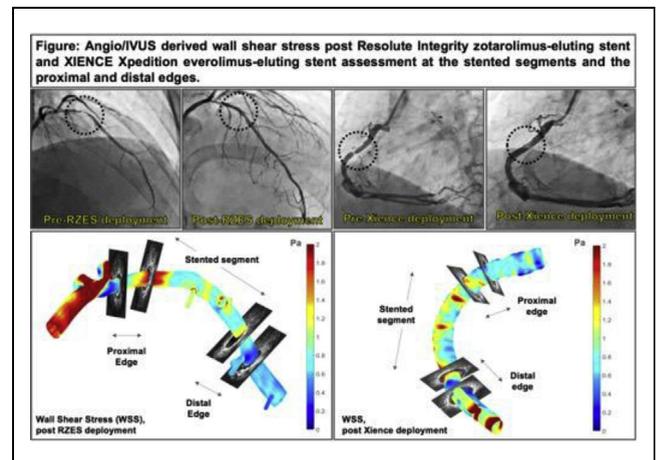
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BACKGROUND Given its continuous wire molding and sinusoidal design, we hypothesized that Resolute Integrity stent (R-ZES) is more conformable than the XIENCE Xpedition stent (X-EES) and therefore may induce more physiologic wall shear stress (WSS) in angulated coronary arteries.

METHODS Interim analysis of angiographic (angio) and intravascular ultrasound (IVUS) acquisitions of patients from the SHEAR STENT study ($n=25/126$), randomized to R-ZES ($n=12$) vs. X-EES ($n=13$) deployment in vessels $\geq 30^\circ$ angulation was performed. In-segment % change in angulation and curvature from pre- to post- stenting were calculated using quantitative coronary angiography. In a sub-group of 6 patients, angio/IVUS derived WSS was performed to explore whether platform conformability affects post-stent WSS.

RESULTS In the whole cohort ($n=25$), vessel angulation decreased from $49 \pm 23^\circ$ to $33 \pm 21^\circ$, ($p=0.008$), a percentile change of $-35 \pm 28\%$, suggesting significant vessel straightening. R-ZES was more conformable than X-EES, demonstrating less straightening of angulation $53 \pm 28^\circ$ to $39 \pm 22^\circ$, ($p=0.183$) vs. $47 \pm 18^\circ$ to $27 \pm 19^\circ$, ($p=0.012$) and of curvature $1.45 \pm 0.64 \text{ cm}^{-1}$ to $1.18 \pm 0.51 \text{ cm}^{-1}$ ($p=0.273$) vs $1.4 \pm 0.7 \text{ cm}^{-1}$ to $0.8 \pm 0.3 \text{ cm}^{-1}$, ($p=0.022$) respectively. In a small subset of 6 patients, we did not observe significant differences in mean WSS within stented segments or at the proximal and distal edges (Figure).

CONCLUSION R-ZES appears to be more conformable than X-EES in angulated coronary arteries. The hemodynamic significance of better conformability, and its effect on neointimal growth at 1 year follow up, remains to be elucidated at completion of the study.



CRT-100.96

Independent Predictors of Reduced Cranial Radiation Exposure Among Physicians Performing Percutaneous Coronary Intervention



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BACKGROUND Reports of left-sided brain malignancies and premature cataract formation among interventional cardiologists have heightened concerns regarding physician cranial radiation exposure. This study investigated independent predictors of physician cranial radiation exposure during percutaneous coronary intervention (PCI).

METHODS Real-time radiation exposure data were prospectively collected from dosimeters worn by operating physicians at the