

BACKGROUND Despite improvements in risk scoring of severity of CAD, there are still low-risk patients who experience CHD events.

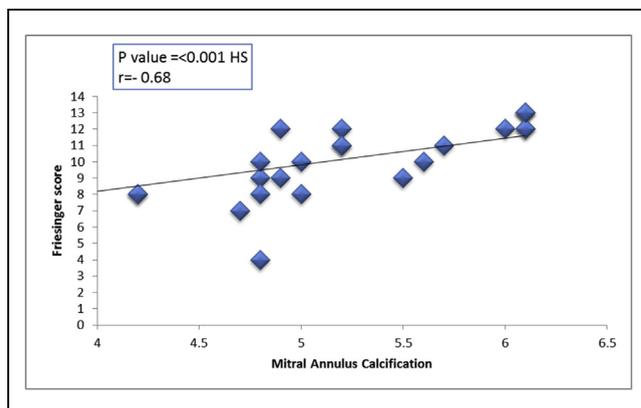
AIM OF STUDY To evaluate the correlation between the severity of Mitral Annulus Calcification and the extent of CAD.

PATIENTS Fifty patients with suspected coronary artery disease and less than 65 years, referred for diagnostic coronary angiography for evaluation of chest pain between January 2015 and April 2017. The study subjects were divided into: Group I - Twenty patients with normal aortic and mitral valves; Group II -Thirty patients with mitral annulus calcification without congenital or rheumatic or dialysis were enrolled.

METHODS After consent, patients were subjected to history, clinical evaluation, lab, and ECG. Thickness of mitral leaflets and their motion were assessed. The severities of coronary artery disease were graded according to Friesinger score, which ranges from 0 to 15. Each of the three main coronary arteries is scored separately from 0 to 5. Score 0: No arteriographic abnormality, Score 1: Trivial irregularities (lesion from 1-29%), Score 2: Localized 30-68% luminal narrowing, Score 3: Multiple 30-68% luminal narrowing of same vessel, Score 4: 69-100% luminal narrowing without 100% occlusion of proximal segments, and Score 5: Total obstruction of a proximal segment of a vessel.

RESULTS Friesinger score is significantly higher in Group II (9.53 ± 2.36) compared to Group I (2.5 ± 2.2) ($P < 0.001$). No significant difference between the groups in patient characteristics. Angiography showed a higher prevalence of CAD in patients in group II than in group I (88% vs. 68%, $p = 0.0004$), and a higher prevalence of left main CAD (14% vs. 4%, $p = 0.009$) and triple vessel disease (54% vs. 33%, $P = 0.002$).

CONCLUSION The association of mitral annulus calcification is strongly positively correlated with extend and severity of CAD.



CRT-100.68

Clinical Presentation and Outcomes of In-stent Restenosis in Second-Generation Drug-Eluting Stents Compared to First Generation Drug-Eluting Stents

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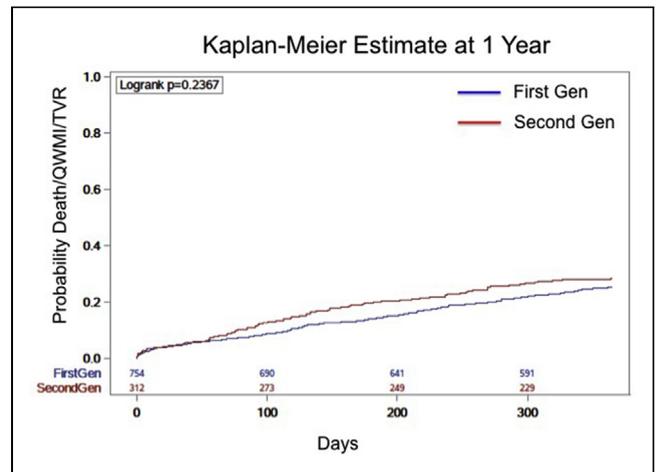


BACKGROUND Second-generation drug-eluting stents (DES) have demonstrated superiority over first-generation DES with respect to reduction in MACE and target lesion revascularization (TLR). The aim of this study was to compare the clinical presentation, lesion characteristics, and outcomes of first-generation DES-ISR to second-generation DES-ISR.

METHODS A retrospective analysis was performed on patients presenting with DES-ISR from 2003 to 2016. Baseline characteristics and prior stent history were obtained. The groups were stratified based on generation of failed DES.

RESULTS One thousand sixty-eight patients received treatment for DES-ISR. Seven hundred fifty-five (71%) had ISR of first-generation DES and 313 (29%) had ISR of second generation DES. There was no difference in baseline demographics between the groups. The second-generation DES-ISR had more diabetes mellitus (55% vs. 46%, $p < 0.01$) and more renal insufficiency (26% vs. 18%, $p = 0.02$). There was no significant difference in complexity of lesions between the groups, but failed second-generation DES were more often used initially to treat prior ISR (28% vs. 20%, $p < 0.01$). There was no difference in presentation of stable angina or unstable angina, but the second-generation DES-ISR group presented more often with myocardial infarction (MI) (14% vs. 7%, $p < 0.01$). There was higher rate of all-cause mortality at one year in second-generation DES (10% vs. 6%, $p < 0.01$) but no difference in composite of death, Q-wave MI, and TLR (23% vs 19%, $p = 0.13$).

CONCLUSION ISR of DES remains a challenge. Second-generation DES have not reduced the incidence of acute coronary syndrome in ISR, and myocardial infarction is actually higher. The reason for such differences may be related to worse comorbidities and higher utilization of second-generation DES to treat recurrent ISR, which likely contributes to differences in all-cause mortality.



CRT-100.69

Cardiac Patients More Likely to Survive to Discharge after Return of Spontaneous Circulation Following In-Hospital Arrest

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BACKGROUND There are limited data on in-hospital cardiac arrest, and hence we don't understand the predictors of outcome in this cohort. This study aims to understand how the admitting diagnosis affects the survival from cardiac arrest and then survival-to-discharge after return of spontaneous circulation.

METHODS Institutional review board of the Cleveland Clinic approved the retrospective cross-sectional study for patients who had in-hospital cardiac arrest from March 2015 to June 2016 at Cleveland Clinic-Fairview Hospital. Cardiac arrest/code blue (CA) protocol was activated on 153 patients during the study period of 15 months. Out of 153 patients, 21 were false activation and they were excluded. Data were collected using the electronic medical record for events before, during and after the CA. SPSS was used for statistical analysis.

RESULTS A total of 132 patients were included in the study. Demographic distribution showed median age of 69.5 years. 59% (78/132) were males, 51% (67/132) had diabetes, 78% (103/132) had

hypertension, 46% (61/132) had coronary artery disease, 39% (51/132) had chronic kidney disease, and 38% (50/132) had COPD. The patients were divided into 2 groups, cardiac and non-cardiac, based on the primary organ system affected at admission. Out of the 132 patients, 48 (36%) were in cardiac and 84 (64%) in non-cardiac group. Return of spontaneous circulation (ROSC) was achieved in 27/48 (56%) patients in cardiac and 49/84 (58%) in non-cardiac group ($p=0.816$). Survival-to-discharge after ROSC was 16/27 (59%) in cardiac and 18/49 (36%) in non-cardiac group ($p < 0.0001$).

CONCLUSION Return of spontaneous circulation was similar between cardiac and non-cardiac group; however, survival-to-discharge after ROSC is significantly higher in patients admitted primarily for cardiac cause. Further studies are needed to define the characteristics of patients achieving ROSC and then survival-to-discharge after in-hospital CA.

CRT-100.70

Self-knowledge Screening For Cardiovascular Risk Factors for Women In Different Age And Labor Activies Populations



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BACKGROUND Cardiovascular disease (CVD) may be clinically different in women compared to men being underdiagnosed and treated. Worldwide, CVD and stroke are the leading causes of death in females, reporting 8.6 million deaths per year in the literature. The objective of this study was to identify the self-knowledge (SK) and prevalence (P) of risk factors (RF) for CVD and stroke in female populations of different age groups and work activities: students of basic cycle medical students (group MS), Police Pacifying Units Police (PPU) (group PPU), and government employees (group GE).

METHODS Cross-sectional, observational study of P of RF for CVD and stroke in female populations of different ages and labor activities between: group GE-27/09/13 and 10/24/2013; group PPU-10/05/2013 and 10/10/2013; groups MS-06/2016 and 12/2016; through the filling of a similar and anonymous questionnaire with 30 objective questions of quick answers about SK of RF: age, stress level, smoking, hypertension (H), dyslipidemia, sedentary lifestyle, obesity, diabetes, weight, height, pregnancy, menopause, gynecological/year (G/Y) and cardiological/year (C/Y) consultations. A positive response or ignorance equaled 1 point. Considered a risk group: women with ≥ 2 points for positive or unknown response.

RESULTS A total of 961 women interviewed were divided into groups MS (total 159), PPU (602) and GE (200), respectively: mean age 20.62, 28.1 and 44.3; high stress 44%, 31%, without report; smoking 3.8%, 7.0%, 16%; H 2.5% (1.3% unaware), 7% (3%), 13% (3%); 76.7% had they cholesterol levels measured (10.0% total cholesterol > 200 mg / dL and 33.3% did not know, 62.9% did not know HDL < 40 mg / dL), 76.0% (7% and 59%, 87%), 95% (22% E 25%, 62%); 89.9% had measured blood glucose, 76%, 88%; S 45.3%, 53%, 36%; BMI calculated 88.7% (weight and height reported) 12.57% ≥ 25 and 0.0% ≥ 30 , BMI 51% being 23% ≥ 25 and 0.0% ≥ 30 and 49% being 17% ≥ 25 and 8% ≥ 30 ; they did consultations G/Y: 79.9%, 90.0% 98% and C/Y: 7.54% 12% and 33%; score ≥ 2 : 98.75%, 97.0%, 74.0%.

CONCLUSION Most women, in different age groups and work activities, were at risk of developing CVD and stroke due to the high prevalence of RF or their lack of knowledge, after applying a similar questionnaire. It was highlighted the importance of primary prevention and awareness programs.

CRT-100.71

Correlating The Presence Of Mitral Valve Calcification In Patients With Aortic Valve Sclerosis On Coronary Artery Disease



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INTRODUCTION Mitral annular calcification (MAC) has been proposed as a risk of atherosclerotic disease, which may be used as a risk marker for CAD.

AIM OF STUDY To compare the CAD risk associated between the presence and the absence of MAC in patients with aortic valve sclerosis (AVS).

PATIENTS AND METHODS Sixty patients with suspected coronary artery disease with aortic valve sclerosis and/or mitral annular calcification, referred for diagnostic coronary angiography for evaluation of chest pain between January 2015 and April 2017. Patients were divided into: Group I - 30 patients with aortic valve sclerosis and Group II - 30 patients with aortic valve sclerosis and mitral annulus calcification. Inclusion criteria: Less than 65 years - patients indicated for coronary angiography. Exclusion criteria: aortic stenosis, rheumatic or congenital aortic valves, hyperparathyroidism, hemodialysis.

METHODS All patients were subjected to history, clinical, lab assessment, ECG, and echo evaluation. AVS were defined as a focal area of increased echogenicity and thickening of the aortic valve leaflets without restriction of leaflet motion and a transaortic flow velocity (< 2.5 m/s) on TTE. MAC was defined as intense echo-producing structure located at the junction of the atrio-ventricular groove and posterior mitral leaflet in parasternal long axis view, measured in millimeters from the leading anterior to the trailing posterior edge and quantified as mild to moderate (1 to 4 mm) and severe (> 4 mm) considering its thickness. Diagnostic angiography were done to all patients evaluated by two observers, which were graded according to Friesinger score. This ranges from 0 to 15. Each of the three main coronary arteries is scored separately from 0 to 5. Score 0: No arteriographic abnormality, Score 1: Trivial irregularities (lesion from 1-29%), Score 2: Localized 30-68% luminal narrowing, Score 3: Multiple 30-68% luminal narrowing of same vessel, Score 4: 69-100% luminal narrowing without 100% occlusion of proximal segments, and Score 5: Total obstruction of a proximal segment of a vessel.

RESULTS According to Friesinger score, there was high statistically significant difference (mean \pm SD was 7.3 ± 2.87 % in group I, and 9.53 ± 2.36 % in group II) ($P < 0.001$). Friesinger score ($r=0.75$) and Leaman score ($r=0.42$).

CONCLUSION MAC can be an independent predictor of significant CAD and there is positive correlation between severity of MAC and severity of CAD.

CRT-100.73

Sex and Racial Disparities in Outcomes in Patients Undergoing Percutaneous Intervention: Data from a Large Tertiary Center



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BACKGROUND Cardiovascular disease is the leading cause of death in men and women. However, there exist limited outcomes data for women and blacks after percutaneous coronary intervention (PCI). The aim of this retrospective analysis was to evaluate the 1-year major cardiovascular events (MACE) in patients undergoing PCI based on gender and race.

METHODS Within our PCI database, we identified 14,387 subjects, of whom 2331 were black men (BM), 1974 were black women (BW), 7151 were white men (WM), and 2931 were white women (WW). MACE at 1