

TCTAP A-165**Prognostic Value of the SYNTAX Score in Predicting In-Hospital Mortality in Coronary Artery Bypass Patients - An Indian Perspective**Jimmy George,¹ Antony George,¹ Prabhavathi Bhatt,¹ Seetharam Bhatt,¹ Cholenahally Nanjappa Manjunath¹¹Sri Jayadeva Institute of Cardiovascular Sciences & Research, India

BACKGROUND SYNTAX score is an objective scoring system to assess severity and extent coronary artery disease. To evaluate the prognostic value of the SYNTAX score in predicting in-hospital mortality in coronary artery bypass patients, at a tertiary center in India.

METHODS A cohort of 325 patients who underwent Coronary Artery Bypass surgery was included in this study from June 2011 to May 2014. They were divided into tertiles according to the SYNTAX score (0-22, 23-33 and above 33). The endpoint was in-hospital mortality.

RESULTS The mortality in SS tertiles were as follows; 0-22=6%; 23-33=4.2% and above 33=14.3%. There was significant increase in mortality in the third tertile ($p=0.0297$). SS above 33 had an Odd's ratio of 3.036 ($p=0.018$) for mortality.

CONCLUSION Severity of coronary artery disease as measured by Syntax Score of more than 33 is a significant predictor of mortality after Coronary Artery Bypass surgery.

TCTAP A-166**Effects of Obesity and Metabolic Abnormality on the Risk of Cardiovascular Disease in the Population of the City of Marrakech**Khramaz Mounia¹¹CHU Mohamed VI, UCAM, FMPM, PCIM, Morocco

BACKGROUND We aimed to investigate combined effects of obesity and metabolic abnormality on the risk of cardiovascular disease and mortality in adults of the city of Marrakech.

METHODS This is a cross-sectional study conducted in 2013 to 2014 among a representative sample of adults in the city of Marrakech in Morocco. Anthropometric and blood pressure measurements were collected, and a blood sample was taken. The prevalence of obesity (body mass index ≥ 30 kg/m²) and abdominal obesity (waist circumference >102 cm in males or >88 cm in females) was determined. The influence of obesity on estimation of the risk of ischemic heart disease was studied using the Framingham function. A question about the social status, dietary habits and physical activity were used.

RESULTS A total of 1198 adults (18-75 years) were included in this study of which 634 were women (39% with menopause). The prevalence of obesity was 46% (20% has body mass index > 40 kg/m²). The prevalence of obesity was 46% (20% has body mass index >40 kg/m²) and the prevalence of abdominal obesity was 37%, that type of obesity was higher in women at 54, 1% than in men. The prevalence of hypertension was higher in obese (39% of obese against 19, 6% of non-obese). Compared with healthy normal-weight individuals, metabolically healthy overweight and obese individuals showed increased risk for hypertension, coronary artery disease and diabetes. Metabolically abnormal obese individuals were at the highest risk for cardiovascular diseases.

CONCLUSION Obesity is a complex multifactorial chronic disease developing from interactive influences of numerous factors (social, behavioral, physiological, metabolic, cellular, and molecular); it's common in adults and increases the risk of cardiovascular disease and premature death. We are in need to expand the detection of obesity and metabolic abnormality by practitioners and raise awareness about the importance of good eating habits and sports.

**OTHER PHARMACOLOGIC AGENTS
(TCTAP A-167 AND TCTAP A-094)****TCTAP A-167****Adherence to Evidence-Based Secondary Preventive Medications and Outcomes Assessments in Patients with Percutaneous Coronary Intervention Who Underwent Bare-Metal Versus Drug-Eluting Stenting**Shaban Mohammed,¹ AbdulRahman Arabi,¹ Ayman El-Menyar,¹ Sabir Abdulkarim,¹ Awad Al-Qahtani,¹ Salah Salah Arafa,¹ Amina Sadiq,¹ Khalid Al Siyabi,¹ Tarek Aboughazala,¹ Jassim Al suwaidi¹¹Hamad Medical Corporation, Qatar

BACKGROUND The study primary aims to assess patients' adherence to evidence based medications (EBM) in terms of dual antiplatelet, beta blockers (BB), angiotensin converting enzyme inhibitors (ACEI)

the angiotensin receptor blockers (ARB) and statins post drug eluting (DES) and bare metal (BMS) coronary stenting.

METHODS A retrospective cohort study for patients who underwent percutaneous coronary intervention (PCI) using DES or BMS was conducted at the Heart Hospital, Hamad Medical Corporation, Qatar. Patients' demographics, risk factors, clinical presentation, discharge and outpatient's follow-up medications were analyzed and compared. End points included adherence to EBM, re-admission and mortality rate.

RESULTS A total of 557 consecutive PCI patients were enrolled with a mean age of 53 ± 10 , of them 85% were males. DES was deployed in 61% of cases that were mainly used for NSTEMI-ACS and elective admission. Language barrier was significantly observed within the BMS group ($p=0.01$). Physician compliance to dual antiplatelet, BB, and Statin was 100% at discharge for both types of stents. The Patients' adherence to those medications post-discharge was non-significantly higher in DES group (82% vs. 79%), whereas patients adherence over 1 year was non-significantly higher in BMS group (78% vs. 73%). There admission rate and mortality within 18 months were comparable between the 2 groups (**Table 1**).

CONCLUSION Despite high adherence to EBM on discharge, 20% of post PCI patients failed to fill their first prescription, irrespective of their co-morbidities, social economic class or the type of stent. The majority of those who adhere to the first refill continue to take their medication sat 1 year; these findings suggest the importance of early clinic follow up after PCI. As readmission rate is high, further studies are needed to address patients' compliance and education.

	DES (61%)	BMS(39)	P value
Age	53±10	53±11	0.22
Arabs	40%	38%	0.75
Sex (females)	12%	19%	0.02
Low Socioeconomic class	48%	50%	0.55
Language barrier	15%	23%	0.01
1st refill* for dual antiplatelet, BB, Statins, and ACEI/ARB	81%	79%	0.43
Adherence over one year	73%	78%	0.2
PPI on discharge	69%	65%	0.25
polypharmacy**	83%	87%	0.28
Diabetes mellitus	35%	36%	0.91
Hypertension	41%	41%	1
No visit in 1 st year	16%	35%	0.001 for each
≥ 3 OPD visits	46%	25%	
Reason for PCI			
STEMI	30%	50%	0.001 for all
NSTEMI	31%	29%	
Unstable angina	30%	18%	
Elective admission	9%	2%	
Readmission within 18 months	24.70%	29%	0.15
Mortality 18 months	2.4	2.6	0.97

* = within 2-3 months post discharge, ** = >5 medication on discharge.**TCTAP A-094****Effect of Beta-blocker Therapy on Mortality Rates in Stable Coronary Artery Disease Patients with Normal Left Ventricular Function After Percutaneous Coronary Intervention.**Seung-Jung Park,¹ Se Hun Kang,¹ Min Su Kim,¹ Hee-soon Park,¹ Byeong Joo Bae,¹ Sang Soo Cheon,¹ Jae Hyung Roh,¹ Pil Hyung Lee,¹ Mineok Chang,¹ Hyun Woo Park,¹ Sung Han Yoon,¹ Jung-Min Ahn,¹ Duk-Woo Park,¹ Soo-Jin Kang,¹ Seung-Wan Lee,¹ Young-Hak Kim,¹ Cheol Whan Lee,¹ Seong-Wook Park¹¹Asan Medical Center, Korea (Republic of)

BACKGROUND Beta-blocker therapy has been shown to benefit patients presenting with acute myocardial infarction (AMI) or left ventricular (LV) dysfunction. However, whether Beta-blockers provide a similar benefit in stable coronary artery disease (SCAD) patients with normal LV function is unknown.

METHODS A population of 4,266 patients with SCAD with normal LV function who were treated by percutaneous coronary intervention (PCI) was evaluated. Clinical characteristics and discharge medications were examined. All-cause death and acute myocardial infarction (AMI) were observed for a median of 34.9 months.

RESULTS Patients' average age was 64 ± 10.1 years and 2782 (65.2%) were men. Mortalities among 2794 (65.5%) patients who received Beta-blockers and 1472 (34.5%) who did not were 75 (2.7%) and 54 (3.7%) patients, respectively. Beta-blockers did not show a significant benefit in mortality and AMI. Unadjusted hazard ratio (HR) for Beta-blocker was 0.724 (95% CI 0.510 to 1.028, $p=0.071$), adjusted HR was 0.729 (95% CI 0.507 to 1.047, $p=0.087$). Diabetes mellitus (HR 1.689, 95% CI 1.167 to 2.445, $p=0.005$) and renal failure (HR 5.244, 95% CI 3.015 to 9.120, $p<0.001$) were an independent predictor of mortality. Renal failure (HR 7.516, 95% CI 3.130 to 18.049) was an independent predictor of AMI.

CONCLUSION Beta-blockers are clearly indicated in heart failure or AMI with a protective effect against death. However, in SCAD patients with normal LV function after PCI, no beneficial effect of Beta-blocker was observed on mortality rates and AMI.

TCTAP A-169
Long-Term Outcomes After Percutaneous Transluminal Renal Artery Stenting for Atherosclerotic Renal Artery Stenosis in the Coronary Drug-Eluting Stent Era: A Japanese Single-Center Retrospective Study

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BACKGROUND We firstly examined the long-term outcomes after percutaneous transluminal renal angioplasty with stenting (PTRA) for atherosclerotic renal artery stenosis (ARAS) in a Japanese daily practice in the coronary drug-eluting stent (DES) era.

METHODS This retrospective, non-randomized, single-center study was conducted in October 2014. De novo 125 ARAS in 106 patients treated between September 2006 and February 2014 were enrolled. Primary clinical endpoint was the incidences of major cardiovascular cerebral renovascular events (MACCRE), comprising of cardiac death including unknown origin, onsets of acute coronary syndrome, stroke, and congestion, and induction of hemodialysis after PTRA. Predictors of MACCRE were analyzed using Cox proportional hazard model.

RESULTS As patient-base, a total of 98.1% had hypertension, 47.2% had diabetic, and 84.9% had coronary artery disease (CAD). Of CAD patients, 92.2% had treated using DES, 40.0% had previous MI, 25.6% had LMT disease, 34.4% had CTO lesions, 37.7% had BNP level ≥ 100 , 31.1% had estimated glomerular filtration rate (eGFR) < 45 , and 22.6% had multiple PAD. As lesion-base, a total of 64.1% had PSV ≥ 250 , 90.2% had RAR ≥ 3.0 , and 93.6% was stenting under the guidance of IVUS. Systolic and diastolic BP (SBP and DBP) before treatment ($167 \pm 25/80 \pm 14$ mmHg) had decreased at followed-up phase ($127 \pm 15/69 \pm 11$ mmHg; $P < 0.001$ for both SBP and DBP). Anti-hypertensive medication was similar at PTRA and at followed-up phase (2.2 ± 1.3 vs. 2.1 ± 1.2). A total of 87.7% had continued dual anti-platelet therapy. Estimated glomerular filtration rate (eGFR) before treatment (54.9 ± 16.6) were well preserved at followed-up phase (52.6 ± 19.7). The incidence of MACCRE was 12.6% with the mean follow-up period of $1,512 \pm 886$ days. Cumulative MACCRE-free ratio at 3 year was higher than 90% and at 5 year than 80%. On Cox regression analysis, eGFR at PTRA was the only independent predictor of MACCRE (hazard ratio: 1.01, 95% CI: 0.53-0.97, $p = 0.031$). In 9 cases of 80 cases, restenosis defined by stenosis $>60\%$ and determined by renal artery duplex and/or angiography was detected.

CONCLUSION The present study firstly showed the long-term acceptable clinical outcomes with the favorable patency after stenting for ARAS in Japanese daily clinical practice under a high use ratio of IVUS.

TCTAP A-170
Examination of Carbon Dioxide Angiography with Cardiac Angiography Systems Lacking Digital Subtraction Angiography

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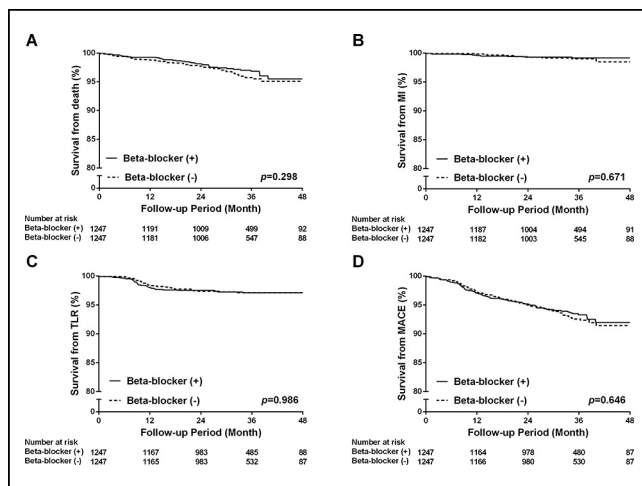
BACKGROUND Several reports suggest that carbon dioxide angiography (CDA) supported endovascular therapy (EVT) reduces for use of contrast media in patients with chronic kidney disease. Although CDA usually performed under the vascular angiography systems with digital subtraction angiography (DSA), not all hospitals have vascular angiography systems. In this study, we thought to evaluate the preset of CDA performed under the coronary angiography systems.

METHODS Toshiba Infinix Celeve CS was used as coronary angiography system, and Subtraction images were produced by manual DSA application. Constructed images were evaluated by contrast to noise ratio and visual estimation.

RESULTS After the evaluation of images, the following presets were recommended;

- Frame Rate - 15 frames/sec.
 - Minimum Pulse Width - 5 msec
 - Additional Frame Number - 10 images
- In this condition, efficient images for EVT were produced.

CONCLUSION This examination proved that coronary angiography system could adapt CDA by using appropriate presets.



PERIPHERAL VASCULAR INTERVENTION (NON-CAROTID, NON-NEUROVASCULAR) (TCTAP A-168 TO TCTAP A-175)

TCTAP A-168
Efficacy of Catheter Directed Thrombolysis for Stent Occlusion in Superficial Femoral Artery in Chronic Period

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BACKGROUND Efficacy of stent for long chronic total occlusion (CTO) in the superficial femoral artery (SFA) has been hampered by stent occlusion. Balloon dilatation with or without aspiration was applied in treatment of stent occlusion. However, it frequently offers suboptimal result and accompanies distal embolization, which complicates situation.

METHODS Since Aug 2014, catheter directed thrombolysis (CDT) first strategy was introduced for patients with stent occlusion after multiple stent implantations for long SFA CTO. Patients who presented with acute limb ischemia and underwent stent implantation within 6 months were excluded.

RESULTS CK and D dimer did not elevate before CDT in all patients. Consecutive 4 patients were treated by catheter directed thrombolysis (CDT) first strategy. CDT was performed without balloon dilatation at first session. Urokinase (720000 IU / day) was continuously administered for several days (2 - 5 days). At second session, antegrade blood flow was restored with residual stenosis in all patients. Subsequent ballooning provided sufficient dilatation without distal embolization.

CONCLUSION CDT first strategy is a safe and effective approach for stent occlusion after multiple stent implantations in long SFA CTO in chronic period. Further study is needed before this strategy will be accepted as standard therapy.