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 social status, dietary habits and physical activity were used.

Syntax Score of more than 33 is a significant predictor of mortality in adults of the city of Marrakech. The mortality in SS tertiles were as follows; 0-22%: 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 Odds 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
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1CHU Mohamed VI, UCAM, FFMPI, 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% 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 Abdurahman Arabi,1 Ayman El-Menyar,1 Sabir Abdurrahim,1 Awad Al-Qahthi,1 Salah Salah Anafa,1 Aminad Sadiq,1 Khalid Al Syahi,1 Tarek Aboujaza,1 Jassim Al Suwaidi1
1Hamad 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 NSTE-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 was no significant increase in mortality within 18 months were comparable between the 2groups (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 for 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.

<table>
<thead>
<tr>
<th>DES (61%)</th>
<th>BMS(39%)</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age 53±10</td>
<td>53±11</td>
<td>0.22</td>
</tr>
<tr>
<td>Arabs 40%</td>
<td>38%</td>
<td>0.75</td>
</tr>
<tr>
<td>Sex (female) 12%</td>
<td>19%</td>
<td>0.02</td>
</tr>
<tr>
<td>Low Socioeconomic class 48%</td>
<td>50%</td>
<td>0.55</td>
</tr>
<tr>
<td>Language barrier 15%</td>
<td>22%</td>
<td>0.01</td>
</tr>
<tr>
<td>Smokers** for dual antiplatelet, BB, Statins, and ACEI/ARB 81%</td>
<td>79%</td>
<td>0.43</td>
</tr>
<tr>
<td>Adherence over one year &gt; 73%</td>
<td>78%</td>
<td>0.2</td>
</tr>
<tr>
<td>PPH on discharge 69%</td>
<td>65%</td>
<td>0.25</td>
</tr>
<tr>
<td>PPH on discharge**</td>
<td>83%</td>
<td>0.28</td>
</tr>
<tr>
<td>Diabetes mellitus 35%</td>
<td>36%</td>
<td>0.91</td>
</tr>
<tr>
<td>Hypertension 41%</td>
<td>41%</td>
<td>1</td>
</tr>
<tr>
<td>No visit in 1st year 16%</td>
<td>35%</td>
<td>0.001 for each &gt;3 OPD visits 46%</td>
</tr>
<tr>
<td>Reason for PCI 30%</td>
<td>50%</td>
<td>0.001 for all</td>
</tr>
<tr>
<td>STEMI 31%</td>
<td>29%</td>
<td></td>
</tr>
<tr>
<td>NSTEMI 30%</td>
<td>18%</td>
<td></td>
</tr>
<tr>
<td>Unstable angina</td>
<td>30%</td>
<td>0.15</td>
</tr>
<tr>
<td>Elective admission</td>
<td>9%</td>
<td>2%</td>
</tr>
<tr>
<td>Readmission within 18 months 24.70%</td>
<td>29%</td>
<td>0.07</td>
</tr>
<tr>
<td>Mortality 18 months 2.4</td>
<td>2.6</td>
<td>0.97</td>
</tr>
</tbody>
</table>

* = 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
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1Asan 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.
CONCLUSION with normal LV function after PCI, no beneﬁt of AMI with a protective effect against death. However, in SCAD patients, 7.516, 95% CI 3.130 to 18.049) was an independent predictor of AMI. 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 < 0.001) were an independent predictor of mortality. Renal failure (HR 7.516, 95% CI 3.130 to 18.049) was an independent predictor of AMI.

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 < 0.001) 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.

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
Hitoshi Anzai
OTA Memorial Hospital, Japan

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. 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.

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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Saitama Prefectural Cardiovascular and respiratory Disease Center, Japan

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 ARAS in 106 patients treated between September 2006 and February 2014 were included. Primary clinical endpoint was the incidences of major cardiovascular 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, 34.1% had estimated glomerular ﬁltration rate (eGFR) ≤ 60 ml/min/1.73 m², and 22.6% had multiple PAD. As lesion-base, a total of 64.1% had PSV > 250, 90.2% had RAR = 0, and 93.6% was stenting under the guidance of IVUS. Systolic and diastolic BP (SBP and DBP) before treatment (167 ± 40/80 ± 14 mmHg) had decreased at followed-up phase (127 ± 45/69 ± 24 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 ± 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: 0.80, 95% CI: 0.53-0.97, p = 0.031). In 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
Mayumi Watanabe
Kawakita General Hospital, Japan

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 Clevie 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.