multivessel spasm than pts without EKG changes, suggesting more intensive medical therapy with close clinical follow up will be required.

Table. Angiographic Characteristics and 12month Clinical Outcomes.

Variable.n(%)	Ischemic ECG change (n=88)	Control (n=1275)	P-value
Angiographic outcomes			
Myocardial bridge	21 (23.5)	346 (26.8)	0.5455
Baseline spasm (narrowing>30%)	38 (43.0)	401 (30.7)	0.0101
Multivessel spasm	52 (58.4)	421 (33)	< 0.001
Diffuse long lesion (> 30mm)	82 (92.1)	1058 (83)	0.0069
QCA Analysis			
Reference Diameter after NTG infusion	2.564±0.653	2.400±0.595	0.0111
Diameter narrowing after ACh infusion (mm)	0.546±0.380	0.727±0.383	< 0.001
Diameter narrowing after ACh infusion (%)	79.49±13.31	69.55±13.07	< 0.001
Acetylcholine dose			
Ach 20ug	3 (3.3)	76 (5.8)	0.3329
Ach 50ug	41 (46)	488 (38.3)	0.0162
Ach 100ug	45 (50.5)	791 (60.6)	0.0511
EKG change			
STD	39 (42.5)	0 (0)	< 0.001
STE	34 (38.2)	0 (0)	< 0.001
T-inversion	17 (19.1)	0 (0)	< 0.001
Chest pain	68 (76.4)	795 (60.9)	0.0066
12month clinical outcomes			
MACCE	2 (2.2)	11 (0.8)	0.1331
Mortality	2 (2.2)	2 (0.1)	0.0004
Cardiac death	2 (2.2)	0 (0)	< 0.001
Myocardial Infarction	1 (1.1)	0 (0)	0.0001
PTCA	1 (1.1)	7 (0.5)	0.4354
CVA	0 (0)	4 (0.3)	0.5967

TCT-311

Overall severity of stenosis in the coronary artery has distinct impacts on clinical outcomes after PCI and CABG in patients with stable angina pectoris

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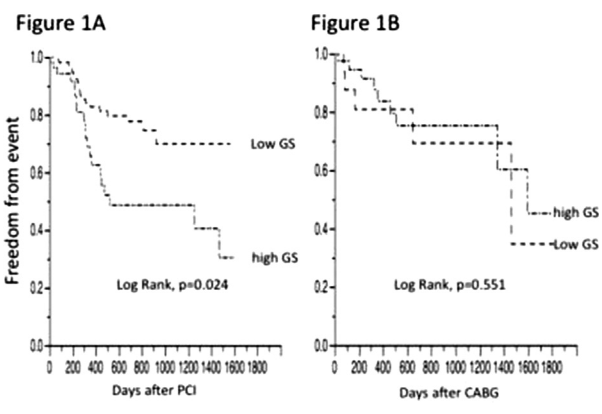
Background: The aim of this investigation was to examine whether overall severity of coronary stenosis has impact on the effects of percutaneous coronary intervention (PCI) and coronary artery bypass graft (CABG) on clinical outcomes in patients with stable angina pectoris.
Methods: We retrospectively analyzed 795 consecutive patients who underwent coronary angiography from September 2007 to January 2012. According to consensus of the Heart Team, the patients received either optimal medical therapy (OMT) (n=554), PCI (n=182) or CABG (n=59). Overall severity of coronary stenosis was quantified by Gensini Score (GS), and patients were categorized into high GS (GS≧56) and low GS (GS<56) by use of the mean GS in patients allocated to PCI or CABG.
Results: The GS in patients treated with CABG was highest among the three groups: 16 ± 23 in OMT, 48 ± 28 in PCI, and 82 ± 46 in CABG ($p<0.05$). Incidence of MACE in the PCI group was significantly higher in high GS subgroup than in low GS subgroup (37% vs. 16%, p=0.0024) (Figure 1A). However, in the CABG group, incidence of MACE was not different between high and low GS subgroups (25% vs. 23%, p=0.56) (Figure 1B). In receiver operating characteristic curve analysis of PCI patients, optimal cut-off value of GS to predict MACE was 66, of which sensitivity and specificity were 43 % and 87 %, respectively (area under curve 0.650, p=0.0014).



Conclusions: Overall severity of coronary stenosis has significant impact on the clinical outcome after PCI but not that after CABG. For stable angina pectoris patients with high GS (especially those with GS≥66), CABG might be preferable to PCI.

TCT-312

Relation Of Living Alone On Three Years Long-Term Outcomes of ST Elevation Myocardial Infarction

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Background: A recent survey showed that more than 30% of households in Japan are single households; this was the largest group among households by family type. In addition, heart disease accounted for 15.9% of all deaths, and this is increasingly annually. The aim is to study the impact of lifestyle (living alone) on long-term outcomes of patients who underwent PCI for acute myocardial infarction.
Methods: Subjects were 488 patients with ST elevation Myocardial Infarction who underwent PCI from 2003 to 2008. Patients were classified into those who lived alone (L group n=182) and those who did not live alone (NL group n=306) and were compared for lifestyle at time of onset (age, occupation, time period of onset, behavior at time of onset, history of dietary therapy or exercise therapy), clinical characteristics, and lesion characteristics. The two groups were compared for mortality rate within 30 days and MACE (cardiac death, non-fatal cardiac infarction, TLR) at 1 year. The two groups were compared for MACE, MACCE, and all-cause mortality rates in the long-term at 3 years as well.
Results: 66.8% had a history of smoking, and the occupation of worker (indoors, light work) was the highest at 16.7%. In QCA, there was no difference between the L group and NL group in late loss as well (L: 1.08 mm vs. NL: 0.96 mm). Mortality within 30 days was significantly higher in the L group compared to the NL group (14.1% vs. 6.8%; $p<0.05$), and this was also higher at 1 year in the L group (25.1% vs.17.9%; $p<0.05$). At 3 years, MACE (34.8% vs. 21.8%; $p<0.01$), MACCE (38.1% vs. 23.3%; $p<0.01$), and all-cause mortality (42.7% vs. 24.9%; $p<0.01$) were all significantly higher in the L group compared to the NL group. When multivariate analysis was used to study associations within the L group, female gender (OR, 0.51; 95% CI, 0.27 to 0.91, $p<0.05$) and small stature (OR, 0.93; 95% CI, 0.88 to 0.98, $p<0.05$) were found to be factors influencing MACE.
Conclusions: It could be considered that living alone affects the long-term prognosis of patients with acute myocardial infarction. Being a female patient with small stature was surmised to be a prognostic factor having a notable association with outcome.

TCT-313

Prolonged Resuscitation Efforts in the Catheterization Laboratory; Mechanical Chest Compressions Saves Lives and Facilitates Percutaneous Cardiac Intervention

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Background: Resuscitation in the catheterization laboratory (cath-lab) with mechanical chest compressions (MCC) and simultaneous percutaneous coronary intervention (PCI) is since 2010 a class IIa recommendation in AHA resuscitation guidelines. Our five year experience (2004 – 2008) with MCC in the cath-lab showed a 25% survival rate. Aim of current study was to evaluate the outcome among patients suffering cardiac arrest in the need of prolonged resuscitation efforts with MCC during simultaneous PCI during the subsequent four years.
Methods: Patients admitted to the cath-lab with circulation on their own and sometime during the intervention suffered cardiac arrest, resistant to normal advanced life support treatment and thus in need of prolonged resuscitation efforts with the MCC LUCAS™-device (Physio-Control Inc/Jolife AB Sweden) were included. Patients arriving to the cath-lab with on-going MCC were also included. The evaluated period ranged between April 2009 – April 2013. Evaluated parameters were duration of MCC, Successful PCI, survival from cath-lab and discharge from hospital.
Results: 44 patients (32 STEMI, 5 Non-STEMI, 2 planned PCI, 1 angiogram, 1 stent occlusion, 1 IABP, 2 cardiac tamponade) were included. Thirty-two patients arrived with sustained circulation and 12 patients arrived with ongoing MCC, 21 were in cardiogenic shock, 33 of 41 patients were successfully treated with PCI. 35 interventions were performed with ongoing MCC. Treatment duration time with MCC for all 44 patients was median (range) minutes, 42.5(5 – 90), those discharged from cath lab (n=17), 20(5 – 90) and of those discharged from hospital (n=8), 10(5 – 45). None of the patients arriving with ongoing MCC to the cath-lab survived to discharge from hospital. However in patients arriving to the cath-lab with sustained circulation, we noted a 25% survival rate to discharge from hospital in Cerebral Performance Category 1 or 2.
Conclusions: This study confirms our earlier study with a survival rate of 25% among patients treated with MCC during simultaneous PCI when arriving to the cath-lab with spontaneous circulation. However, survival rate among patients arriving to the cath-lab with ongoing MCC are dismal.

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