ACUTE CORONARY SYNDROME: STEMI, NSTE-ACS
(TCTAP A-125 TO TCTAP A-134)

TCTAP A-125
Leukocyte Post Primary Percutaneous Coronary Intervention as Predictor of Left Ventricle Systolic Function in Patient with ST Elevation Myocardial Infarction
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BACKGROUND The dynamic of coronary microcirculation post primary percutaneous coronary intervention (PPCI), which achieves steady state after 12-48 hours, is influenced by many factors, one of them is inflammation, and this condition has been correlated with clinical outcome. The aim of this study was to see the correlation between total leucocytes count 48 hours post PPCI with short term improvement of left ventricle (LV) function.

METHODS Of total 103 STEMI subjects whom underwent PPCI, 62 subjects were included completely from Jan to Apr 2013, and followed until 30 days. Total leucocyte count was measured during admission and 48 hours post PPCI. Subjects divided in two groups, group with total leucocyte count 48 hours post PPCI >12,020/µL and group with total leucocyte count 48 hours post PPCI <12,020/µL. TIMI flow and myocardial blush grade were measured immediately post PPCI. LV systolic function was measured using regional wall motion index (RWMI) focusing on infarct related artery (IRA) by echocardiography, soon after PPCI and at 30 days. Intraclass and inter observer variability were analyzed. Logistic regression was used to correlate variables using software Stata ver 12.

RESULTS Patients with total leucocyte count 48 hours post PPCI >12,020/µL, had OR 4.4 (95% CI:0.98–19.85; p=0.05) to have irreversible segmental LV function in IRA territory at 30 days. Multivariate analysis consistently shown leucocyte post PPCI as strong predictor of RWMI irreversibility, with OR5.6 (95% CI:1.08–28.6; p=0.039).

CONCLUSION High total leucocyte counts 48 hours post PPCI (>12,020/µL), can predict irreversible recovery of segmental LV function in IRA territory at 30 days.

TCTAP A-126
ST-Segment Elevation in Lead aVR as the Predictive Value in Acute Coronary Syndromes
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BACKGROUND This study aimed to analyze the prognostic value of the presence of ST elevation in lead aVR in initial standard electrocardiogram (ECG) performed on admission in combination with clinical variables for acute coronary syndromes (ACS).

METHODS In 446 consecutive patients with ACS, we evaluated admission ECG for aVR and divided patients into two groups: group A (254 patients with non-ST elevation in aVR) and group B (192 patients with ST elevation). The clinical and the coronary angiographic data were compared.

RESULTS 1) There was no significant difference in age, gender, smoking, hypertension, hyperlipidemia and diabetes between two groups. 2) There were more patients with left main lesion and triple vessel lesion in group B (24/192 and 36/192) than group A (11/254,31/354, p value =0.01 for left main lesion and 0.055 for triple vessel lesion). 3) Survival analysis: The death in group A and group B was 25 (11.02%) and 35 (18.23%), p=0.031, respectively. The overall survival rate of group A was significantly higher than that of group B (log-rank test, p=0.026, Kaplan-Meier survival curve seen at graph 1). 4) Cox regression analysis showed that patient mortality hazard in ST elevation of aVR was 1.745045 folds of patients with non-ST elevation (p=0.0275).

CONCLUSION ST-segment elevation in lead aVR has a diagnostic and prognostic value in patients with ACS and may provide an additional prognostic value to the conventional cardiovascular risk factor.

TCTAP A-127
Transradial Versus Transfemoral Primary Percutaneous Coronary Intervention for Acute ST-Segment Elevation Myocardial Infarction
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BACKGROUND Recent several studies suggest better clinical outcome of the transradial intervention (TRI) for primary percutaneous coronary intervention (PPCI) for acute ST-segment elevation myocardial infarction (acute STEMI). The purpose of this study was to determine whether TRI for acute STEMI is associated with better outcome and safety compared with transfemoral artery intervention (TFI) in real-world practice.

METHODS We analyzed 271 consecutive acute STEMI patients (age 63.5±13.1, 73.4% of male) underwent PPCI in Dongguk University Gyeongju hospital and the patients with cardiogenic shock were also included in this study. The number of patients of TRI was 113 (61.6±13.7 years, 84.1% of male) and TFI was 158 (64.9±12.4 years, 65.8% of male). We compared TRI and TFI in terms of death in 48 hours after admission and bleeding (hemoglobin decreased more than 4 g/dl and RBC transfusion).

RESULTS There were no differences of catheterization laboratory to needle time (8.0±5.3 min vs 9.2±5.3 min, p=0.058) and procedure success rate (92% vs. 96%, p=0.114) between TRI group and TFI group. Mortality in the TRI group and TFI group was 8.0% versus 6.7% (p=0.387) at 48 hours after admission and 8.0% versus 11.4% (p=0.236) at 30 days. However, the incidence of bleeding was lower in TRI group than TFI group (0% vs. 7.0%, p=0.002). In binary logistic regression analysis, TRI for acute STEMI was not independent predictor of mortality but left main and triple vessel disease was only independent predictor for mortality (10.73, 95% CI, 3.78–30.41).

CONCLUSION Our study shows that TRI for acute STEMI did not reduced mortality at 48 hours and 30 days after admission but decreased bleeding complications. In experienced operator for both access sites, the TRI for acute STEMI is the one of the option for reduction of access site and bleeding complication.

TCTAP A-128
Impact of Regional Differences on Cardiovascular Outcome in Patients Undergoing Coronary Angiography or Intervention in Acute Coronary Syndrome: A Population-Based Study from NHIRD of Taiwan
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BACKGROUND Patients with acute coronary syndromes (ACS) undergoing coronary angiography (CAG) or percutaneous coronary intervention (PCI) are shown to have better outcome. Although the