

Impact of Chronic Calcium Channel Blocker Therapy on Insulin Resistance in Asian Population

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Background: There have been several reports that calcium channel blocker (CCB) therapy is associated with decreased insulin sensitivity. We evaluated the impact of CCB on insulin resistance in Asian population with the aim of clarifying its association. **Methods:** From February 2005 to April 2013, 4,983 consecutive patients were enrolled. Baseline clinical data were adjusted by a propensity score matching (PSM) analysis using the logistic regression model (Adjusted variables; age, gender, body mass index, hypertension, diabetes mellitus, hyperlipidemia, hyperuricemia, chronic kidney disease, lipid profile, and other medications except for CCB). Insulin resistance index based on the homeostatic model assessment-insulin resistance (HOMA-IR). Statistical analysis was performed by using the paired Student's t-test **Results:** A number of 3,198 patients after PSM analysis (1,599 CCB vs 1,599 Control) had well matched baseline characteristics with the mean follow-up duration 617±260 days. Both CCB group and control group showed significant increased HOMA-IR (28% vs 30%) and fasting blood insulin level (29% vs 29%) on follow up day compared to baseline ($p < 0.001$). However, no significant fasting blood glucose and HbA1c changes were shown in both groups (Table). **Conclusions:** In our study, there was no clear association between chronic CCB therapy and increasing insulin resistance in Asian population.

Variable	CCB group (n = 1,599)			Control group (n = 1,599)		
	Baseline	Follow-up	p value	Baseline	Follow-up	p value
FBS	113±30	115±30	0.005	113±35	114±31	0.308
HbA1c	6.3±1.0	6.3±1.0	0.117	6.3±1.1	6.3±1.0	0.888
Insulin	8.8±7.0	11.4±6.5	<0.001	9.0±6.8	11.7±9.7	<0.001
HOMA-IR	2.5±2.5	3.3±2.6	<0.001	2.6±2.5	3.4±4.6	<0.001
Mean follow up	618 day			617 day		

Timing of Coronary Artery Bypass Graft Surgery in Non-ST-Segment Elevation Myocardial Infarction

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Background: The timing of coronary artery bypass graft surgery (CABG) after acute myocardial infarction remains controversial. Although current guidelines recommend delaying CABG for a few days for stable ST-segment elevation myocardial infarction, the optimal timing of the CABG in NSTEMI patients is still unknown. **Objective:** We assessed the effect of CABG timing on in hospital mortality, hospitalized day and MACE free survival in NSTEMI patients. **Subjects and Methods:** A total of 402 patients with NSTEMI, enrolled in the nationwide prospective KAMIR between November 2005 and December 2011, were divided into early, intermediate and late groups based on the median time from admission to CABG. Regression adjustment was applied to control for factors associated with clinical urgency before CABG **Results:** I decided the group as A, B and C, who underwent CABG with 2days, 3 to 7days and after 7days. Compared to the group A (≤ 2 days, N=153), group B (3 to 7days, N=151) and group C (> 7 days, N=98), hip circumference was higher in group A (91.81 ± 13.66 , $p=0.049$). Dyspnea was dominant in group C (44.3% versus 20.7% and 29.7%, $p < 0.001$). Creatinine (1.63 ± 1.92 , $p=0.024$) and NT-proBNP (5740.31 ± 9214.52 , $p=0.041$) was dominant in group C. Group C had a higher prevalence of diabetes mellitus (55.7% versus 32.9% and 40.3% $p=0.02$), left ventricular dysfunction ($LVEF \leq 40\%$) (41.1% versus 19.2% and 19.3% $p < 0.001$). GRACE risk score was lower in group B (58.4% versus 72.9% and 72.1%, $p=0.039$). But angiographic finding did not differ. After adjustment, in-hospital mortality was not different between the group A, group B, and C (5.2%, 3.1%, 5.1%, $p=0.426$). The complication sign of MI and left ventricular dysfunction ($LVEF \leq 40\%$) was a predictor of in-hospital mortality. **Conclusion:** There was no significant statistical difference in hospital mortality regardless of the group A and C had the higher clinical risk profile. But the group B showed the lowest in hospital mortality and highest MACE free survival compared to other group. Furthermore, there was reduced total hospitalization. If the patient was stable, 3 to 7day CABG after MI was reasonable.