Differential Benefit of Statin 2ndary Prevention of AMI according to level of TG and HDL cholesterol

[1]Division of cardiology, Department of internal medicine, Gwangju Veterans hospital, [2]Division of cardiology, department of internal medicine, chonnam national university college of medicine, chonnam national university hospital

*Sang Woo Jeong[1], Wan kim[1], Sun Ho Hwang[1], Won Yu Kang[1], Sang Cheol Cho[1], Kyung Hwan Kim[1], Gyu Ik Lee[1], Young Eun Jo[1], Myung Ho Jeong[2], Young Keum Ahn[2]

Background: The benefit of statin in acute myocardial infarction (MI) was well established. However, there were few studies about the differential efficacy of statin according to the baseline level of triglyceride and high-density lipoprotein (HDL)-cholesterol. **Objective:** To address the efficacy of statin in secondary prevention of MI according to the level of triglyceride and HDL-cholesterol on admission. **Methods:** The 36580 acute MI patients were enrolled from November 2005 to August 2012. Total patients were divided according to level of triglyceride and HDL cholesterol on admission and evaluated the efficacy of statin in patients with no lipid component of metabolic syndrome (Group A; n = 15,461) (HDL cholesterol ≥40 mg/dL & triglyceride < 150 mg/dL) and both components of metabolic syndrome (Group B; n = 4,399)(HDL < 0.001). However, the efficacy of statin was not prominent in Group B (HR = 0.987; 95% CI; 0.708-1.376; $p = 0.939$). After propensity matching, the survival analysis revealed that statin therapy reduced the risk of MACE in group A (HR = 0.752, 95% CI; 0.609-0.929, $p = 0.008$). This result was mainly due to reduction of cardiac death (HR = 0.628, 95% CI; 0.420-0.938, $p = 0.023$). Multivariate analysis revealed that use of statin contributed independently to improvement of clinical outcome in only Group A (HR = 0.692, CI; 0.543-0.882, $p = 0.003$). **Conclusions:** The long-term benefit ofstatin was not prominent in acute MI patients with lipid profiles of metabolic syndrome. Therefore, different lipid-lowering strategy is necessary in patients with low HDL and high triglyceride.

The Benefits of Bisoprolol were Comparable with Carvedilol in Secondary Prevention of Acute MI

[1]Division of Cardiology, Department of Internal Medicine, Gwangju Veterans Hospital, Gwangju, Korea, [2]Division of Cardiology, Department of Internal Medicine, Chonnam National University

*Gyu Ik Lee[1], Wan Kim[1], Sun Ho Hwang[1], Won Yu Kang[1], Sang Cheol Cho[1], Kyung Hwan Kim[1], Young Eun Jo[1], Sang Woo Jeong[1], Myung Ho Jeong[2], Young keun Ahn[2]

Objective: Although the benefits of carvedilol, non-cardioselective B-blocker, were demonstrated by several studies, there were no studies which evaluated the efficacy of bisoprolol, a class of B1-selective beta blocker, in secondary prevention of acute myocardial infarction(MI) patients who underwent percutaneous coronary intervention (PCI). **Methods:** Total 13,813 patients who underwent PCI were treated with carvedilol or bisoprolol at discharge in Korean Acute MI Registry (KAMIR). After 1: 2 propensity matching, 1,806 patients were enrolled as bisoprolol group and 3,612 patients as carvedilol group. The primary end point was composite of major adverse cardiac events (MACEs)which were defined as cardiac death, non-fatal MI, target vessel revascularization, and coronary artery bypass surgery. The secondary end point was defined as respective all-cause mortality, cardiac death, non-fatal MI, any revascularization or target vessel revascularization. **Results:** After adjustment of baseline characteristics by propensity matching, the MACEs free survival rate was not different between bisoprolol and carvedilol group. The subgroup analysis showed that cumulative incidence of MACEs was lower in bisoprolol group in patients having Killip class III or IV comparing with carvedilol group. The incidence of secondary end points was not different between two groups. **Conclusions:** The benefits of bisoprolol were comparable with carvedilol in secondary prevention of acute MI. The use of bisoprolol may be preferable in hemodynamically unstable acute MI patients on admission.