Results: The serum C (250.9±38.5 vs.167.0±24.5 mg/dL P<0.05) and LDL-C (170.7±42.2 vs. 123.8±16.0 mg/dL; P<0.05) decreased significantly after A. However, no significant elevation of C and LDL-C was noted after withdrawal of A. The VCA-M1592.0±208.31 vs 508.43±178.04 mg/ml) and the iSO(14.43±8.91 vs 10.56±3.31 mg/ml) were significantly increased to 591.18±203.65 ng/ml and 12.34±4.53 ng/ml respectively at day 2 after withdrawal of A. The IP-A decreased significantly to 9.93±6.77 ng/ml at day 3.

Conclusion: After 12 wks of A, the positive pleiotropic effects of statin are demonstrated simultaneously with lowering the serum C. However, after withdrawal of A, these pleiotropic effects are significantly attenuated within days and are independent on the elevation of serum C.

Prevalence of Risk Factors for Coronary Disease in Myocardial Infarction in the Community
Francisco Lopez-Jimenez, Steven J. Jacobsen, Guy S. Reeder, Susan A. Weston, Jill M. Killian, Ryan Meredith, Valerie Y. Roger, Ryan Meverden, VBronique L. Roger, Mayo Clinic, Rochester, MN

While reports suggest that the prevalence of cardiovascular risk factors (CV RF) in acute myocardial infarction (MI) may be low, there is a paucity of data on the prevalence of modifiable CV RF among patients with MI in a geographically defined population, and it is not known whether the prevalence is changing over time.

OBJECTIVES: To determine the overall prevalence of CV RF among patients with MI in the population and their change over time.

DESIGN: Population-based MI incidence cohort.

METHODS: We analyzed the prevalence of major modifiable CV RF including overweight/obesity, history of smoking, diabetes mellitus, hypertension and hyperlipidemia; and non-modifiable CV RF including age<75 years, male sex or family history of coronary disease among all residents of Olmsted County, MN, hospitalized for a validated incident MI between 1979 and 1999. Demographic and clinical characteristics were collected from community medical records.

RESULTS: During the study period, 2,277 subjects had a MI. Only 3.6% of patients did not have modifiable CV RF. When compared to patients with a MI from 1979-63, patients who had the MI from 1994-98 were more likely to be overweight/obese (75% vs 70%, OR=1.27 for those with MS only [p<0.0001], 1.27 for those with DM only [p=0.08], and 1.99 for those with both MS and DM [p=0.0001]). Results were similar for total mortality with HRs of 1.15 [p<0.0001], 1.63 [p=0.01], and 1.86 [p=0.001] respectively.

Conclusions: The presence of MS with or without untreated DM was associated with a significantly increased risk in mortality compared to those with neither MS nor DM. Thus the treatment of MS and its individual components are an important part of the strategy for the prevention of CVD.

The Influence of the Metabolic Syndrome on 24-Year Mortality Among Middle-Aged Men in the Multiple Risk Factor Intervention Trial (MRFIT)
Jerome D. Cohen, Lynn E. Eberly, Ronald Prineas, Gabriela Vasquez, MRFIT Research Group, Saint Louis University, St. Louis, MO, University of Minnesota, Minneapolis, MN

Background: The Metabolic Syndrome (MS) has been recently defined and identified as an important clustering of risk factors for cardiovascular disease (CVD). We explored the long-term mortality of men with MS and with or without concurrent untreated diabetes mellitus (DM).

Methods: 12,817 men who participated in the MRFIT were classified according to baseline presence of MS and/or DM not on hypoglycemic agents. MS was defined as three or more of: body mass index <30 kg/m², triglycerides >150 mg/dL, high-density-lipoprotein cholesterol <40 mg/dL, blood pressure >130+85 mm Hg, and fasting glucose >110 mg/dL. Untreated DM was defined as fasting glucose >126 mg/dL and not on hypoglycemic agents. Proportional hazards regression models were fit for total and CVD mortality with adjustment for age, race, cigarette smoking, alcohol drinks, total cholesterol, uric acid, and unexplained treatment group (intervention, screening consultation, dietary counseling to lower cholesterol, and hypertension medication; control: usual care by personal physician).

Results: 4,725 men had MS only, 97 had DM only, and 556 had both; 43 men on hypoglycemic agents were excluded. There were 4,556 total and 2,221 CVD deaths over median follow-up of 24.4 years. Average blood pressure was reduced from 135/91 mm Hg at baseline to 124/82 after 6 years; average cholesterol was reduced from 240 to 231 mg/dL. Adjusted hazard ratios (HR) for CVD mortality relative to those with neither MS nor DM were 1.27 for those with MS only [p<0.0001], 1.99 for those with DM only [p=0.08], and 1.99 for those with both MS and DM [p=0.0001]. Results were similar for total mortality with HRs of 1.15 [p<0.0001], 1.63 [p=0.01], and 1.86 [p=0.001] respectively.

Conclusions: The presence of MS with or without untreated DM was associated with a significantly increased risk in mortality compared to those with neither MS nor DM. Thus the treatment of MS and its individual components are an important part of the strategy for the prevention of CVD.