was applied and risk calculations done without and after allowing for other risk factors to establish the independence of the association of a positive family history and MI.

692 men and 267 women developed fatal or non-fatal MI during the follow-up. Compared with subjects without a family history, the hazard ratio (HR) of MI was 1.81 (95% confidence interval, CI, 1.50–2.18) in men and 1.81 (95% CI, 1.36–2.41) in women with one or more first-degree relatives with MI. The risk factor profile was significantly worse in individuals with a family history of MI. After allowance for classical risk factors, the HR decreased to 1.72 (CI, 1.42–2.07) and 1.56 (CI, 1.16–2.09) in men and women respectively (NS). In this population, family history of MI accounted for 15% of all cases of MI in men and 14.3% in women, independent of other known risk factors.

Approximately 15% of all cases of MI can be attributed to familial factors remaining to be elucidated.

P302 GENDER DIFFERENCES IN THE CORONARY RISK FACTORS MANAGEMENT: *PRESEA* STUDY

P. Pramparo, H. Schargrodsky, M. Ciruzzi, C. Cuneo, J. Humphreys, S. Notta, A. Cardone, A. Balestrini, C. Serra. *For the PRESEA Study, Argentina*

Several lines of evidence suggest that coronary risk factors are treated less aggressively in women than in men. To define this issue we compared the current management of the modifiable coronary risk factors (CRF) received by men and women, 6 to 24 months after a coronary event (angina pectoris, acute myocardial infarction) or revascularization procedure (angioplasty, coronary surgery) and the adherence degree to the corrective measures of their CRF. During 1998 and 1999, 54 medical centers of Argentina enrolled 2007 consecutive patients (481 women and 1526 men). Information about CRF and medical treatments used were collected retrospectively from the medical records (MR). The mean age was: 65.6±10.4 for women and 59.5±10.3 for men (p < 0.001). In MR the smoking habit were less recorded in women than in men (19.5%; vs. 11.9%, p < 0.001). After 6–24 months from hospital discharge 1399 patients were interviewed: 333 (69.2%) women and 1066 (69.9%) men. At the interview women compared with men showed more hypercholesterolemia (211.8±37.3 mg/dl vs. 204.4±37.5 mg/dl: p = 0.006), more uncontrolled blood pressure ($\geq$140/90 mm/Hg), (51% vs. 44%; p = 0.04), were more sedentary (62%vs. 43.2%; p = 0.0001) and were less current smokers (5% vs. 11%; p = 0.005). Women were using more calcium-channel-blockers than men (27.9% vs. 21.7%; p = 0.05), but there were not differences between men and women in the use of lipid lowering drugs (35.1% vs. 39.9%), β-blockers (62.5% vs. 60.6%), Aspirin (84.7% vs. 85.2%) or angiotensin-converting-enzyme-inhibitors (30% vs. 30.7%). In this coronary disease population, women compared with men presented more hypercholesterolemia, hypertension and sedentarism. The indication of lipid lowerig drugs and cardiovascular protective drugs, except calcium-channel-blockers, was similar in both genders.

P304 RISK FACTORS FOR EARLY ATHEROSCLEROSIS IN A POPULATION AT RISK FOR DIABETES: THE RIAD STUDY

T. Temelkova-Kurktschiev, E. Henkel, C. Koehler, M. Hanefeld. *Centre for Clinical Studies, Technical University Dresden, Germany*

The aim of our study was to examine carotid IMT and atherosclerosis risk factors in newly detected diabetes mellitus (DM) and impaired glucose tolerance (IGT) in comparison to normal glucose tolerance (NGT). Subjects (n = 1139) were examined from the Risk factors in IGT for Atherosclerosis and Diabetes (RIAD) Study. Inclusion criteria: age 40–70 years, family history of diabetes, obesity and/or dys/hyperlipoproteinemia. A standard oral glucose tolerance test with 75 g glucose was conducted. Plasma glucose, HbA1c, lipids, fibrinolytic and coagulation parameters were measured by conventional methods; proinsulin and real insulin by highly specific enzyme immunoassays and albuminuria by nephelometry. Carotid IMT was examined by B-mode ultrasound. IMT was found to increase significantly in parallel to glucose intolerance: 0.85±0.02 (mean±SEM) mm in NGT, 0.93±0.02 mm in IGT and 0.98±0.03 mm in DM. Albuminuria also rose significantly in parallel to glucose intolerance (15.4; 19.6 and 28.5 mg/l in NGT; IGT and DM resp.). Triglycerides level in IGT was significantly higher than NGT but significantly lower than in DM (1.48; 2.03; 3.21 mmol/l in NGT, IGT, DM resp.). HDL cholesterol in IGT (1.35 mmol/l) and DM (1.25 mmol/l) was significantly lower than in NGT (1.53 mmol/l). PAI was significantly higher in IGT (53.1 ng/ml) and DM (60.9 ng/ml) vs. NGT (40.7

ng/ml). IGT and DM exhibited significantly increased levels of real insulin (NGT-72; IGT-91; DM-124 pmol/l) and proinsulin (NGT-2.0; IGT-2.4; DM-4.5 pmol/l). Our study showed that the 2 h postchallenge plasma glucose, albuminuria and leucocytes count, along with established risk factors, such as age, male sex, HDL-cholesterol and total cholesterol, were independent determinants of IMT in this population at risk for diabetes.

P305 HIGH PLASMA HOMOCYSTEINE IS A RISK FACTOR FOR STROKE AND CONGESTIVE HEART FAILURE IN AN ELDERLY ITALIAN POPULATION

G. Mazzetto, S. Martini, M.C. Corti[3], S. Minervini[3], A. Lombardi[1], L. Previato, A. Burlina[2], C. Gabelli, S. Varotto, I. Cortella, G. Baggio[1], G. Crepaldi. *Clinica Medica I; [1]Medicina Generale; [2]Department of Pediatrics, University Hospital, Padua; [3]Geriatric Evaluation Unit, Hospital of Camposampiero, Italy*

Aim of this study was to evaluate the distribution of plasma homocysteine (Hcy) and its association with prevalent chronic diseases in a subsample of 583 participants in the Progetto Veneto Anziani (PRO.V.A.) study. This is an observational prospective study on the health status of a sample of 3099 community dwelling persons aged 65 years and older living in two areas of Veneto Region (Italy). Hcy (by HPLC and fluorescence detection) and several factors affecting its metabolism, creatinine (by automated standard procedures), vitamin B12 and folates (by automated immuno-chemiluminescence-LIA) as well as the presence of the thermolabile MTHFR C677 $\rightarrow$ T variant were determined in 361 females and 222 males from one of the two areas. Angina, myocardial infarction (MI), coronary heart disease (CHD), congestive heart failure (CHF), peripheral artery disease (PAD), and stroke prevalence was 6%, 4.8%, 7.5%, 11.7%, 13.2%, and 4.5% respectively. Mean Hcy levels were 17.1±10.4 μmol/l (median 14.7); values were higher in males than in females (19.6 vs. 15.9, p < 0.001) and an increase with age classes was observed (p for trend < 0.05). The prevalence of MTHFR alleles was C = 0.613, T = 0.387; carriers of TT genotype were 14.1% and their mean Hcy levels were not significantly different as compared to other genotypes. Pearson coefficients showed significant correlations of Hcy with creatinine, folates, vitamin B12. Significant differences in Hcy levels were observed in people affected with CHF (p = 0.001) or previous stroke (p = 0.0067) vs. non affected subjects even after correction for age, while no significant differences were found in participants with angina, MI, CHD or PAD vs non affected people. MLR analysis introducing in the model Hcy quartiles, age and sex showed an U shaped association between Hcy levels and clinical outcomes (stroke, CHF) with a treshold effect at 14.8 μmol/l. In conclusion, with the limitations of a cross-sectional design, we confirmed that high Hcy is a risk factor for stroke, while the association of high Hcy values with CHF appears a new finding and needs further investigation. Results from the ongoing longitudinal phase of the study might clarify this relationship.

P306 THE REDUCTION OF CORONARY RISK AFTER SHORT-TERM TREATMENT WITH SIMVASTATIN AND PRAVASTATIN

M. Boh[1], M. Šebeštjen[2], J. Niegowska[3], L. Banfič[4], S. Turk[1], I. Keber[2]. *[1]Krka d. d., Novo Mesto; [2]University Clinical Center, Dept. of Angiology, Ljubljana, Slovenia; [3]Institute of Cardiology, Warsaw, Poland; [4]University Clinic for Cardiovascular Diseases, Zagreb, Croatia*

In an 18-week parallel, double blind, international, multicenter study we compared the effect of simvastatin and pravastatin on calculated coronary risk in 33 males and 14 postmenopausal females with hypercholesterolemia.

After six weeks of placebo treatment and AHA step I diet, patients were randomly assigned to receive 10 mg of simvastatin or pravastatin. The drugs were titrated to 20 mg after six weeks in patients who did not reach the target LDL cholesterol 3.4 mmol/l. We evaluated the effect of the drugs on serum lipids and determined other parameters of coronary risk such as age, blood pressure levels, smoking, familial and personal history of coronary heart disease, and diabetes mellitus. We calculated absolute 10-year risk for the development of coronary heart disease at baseline and after the 12-week therapy using the PROCAM algorithm.

The calculated coronary risk at baseline was 5.4% and 7.8% in simvastatin (n = 21) and pravastatin (n = 26) group, respectively, with no significant difference between the two groups. There were also no significant differences

POSTERS