

**Methods:** The clinical course and risk profile of 22 patients (15 males and 7 females) with peripheral arterial occlusive disease (PAD) were observed prospectively following angioplasty (PTA). Clinical examination and eco-color doppler were used during follow-up.

**Results:** Seven subjects (31.8%; 6 men and 1 woman) had high Lp(a) levels ( $>30$  mg/dL). Up to now (work still in progress) 3 male patients (13.6%) had a restenosis during the first month of follow-up. They were in therapy with statins (LDL levels  $<100$  mg/dL) and they were characterized by the higher Lp(a) levels of the male group. The only female with high Lp(a) levels (77 mg/dL) had a restenosis during the third month of follow up. At the sixth month of follow up we noted nine (7 males and 2 females) restenosis (40.9%); five patients (4 males and 1 female) of this group had high Lp(a) levels (55.5%).

**Conclusions:** In our little sample we noted that subjects with high Lp(a) levels made a premature restenosis if compared with patients with normal Lp(a) levels ( $p=0.023$  Fisher's Exact Test). In international literature high Lp(a) levels are considered as an independent risk factor for recurrence after PTA. In our prospective study trend is supported by these partial results.

## 223 SERUM LEVEL OF C-REACTIVE PROTEIN IN SUBJECTS WITH METABOLIC SYNDROME, HYPERTENSION, AND DIABETES TYPE 2 IN IRANIAN SAMPLE POPULATION

H. Esmaili<sup>1</sup>, M. Ghayour-mobbarhan<sup>2,3</sup>, M. Azimi-Nezhad<sup>3</sup>, N. Dehghani<sup>3</sup>, H. Alavizadeh<sup>3</sup>. <sup>1</sup>Community Health and Statistic Department, Mashhad University of Medical Sciences (MUMS), Mashhad Iran; <sup>2</sup>Department of Nutrition and Biochemistry, Faculty of Medicine, MUMS, Mashhad Iran; <sup>3</sup>Hearth Research Center, Avicenna Research Institute, MUMS, Mashhad, Iran

**Background:** This study was conducted to measure the serum level of C-reactive protein and determined its association with metabolic syndrome, hypertension and diabetes mellitus subjects in Iranian sample population.

**Material and methods:** Among 2353 participants, include 1207 women and 1146 men with age between 15-64 years, in urban and rural areas, anthropometric and biochemical factors including height, weight, waist circumference, fasting blood sugar, HDL-c, triglycerides, total cholesterol, LDL-c, CRP were measured according to standard protocols. We consider the Adult Treatment Panel III definition for metabolic syndrome, and 7th definition of Joint national Committee for hypertension, and International Diabetes Federation definition for diabetes. Data have analyzed by SPSS 11.5 software. Statistical analysis included ANOVA and chi-square tests, and multifactor analysis using binary logistic regression  $p < 0.05$  was considered significant.

**Results:** CRP positive subjects among women were more than men, but there was no significant difference between two groups. There was a significant differences between metabolic syndrome and diabetes patients and normal subjects ( $p=0.004$ ).

We could not find a considerable association between hypertensive subjects and CRP.

**Conclusion:** Although, there is a relationship between diabetes and metabolic syndrome and C reactive protein, we suggest that more studies should conduct to more investigation on this issue.

## 224 HYPOLIPIDEMIC INFLUENCE OF A NEW ANTIOXIDATIVE DRUG-ELTACIN IN POSTINFARCTION CARDIOSCLEROSIS OLD PATIENTS

R. Zaslavskaya<sup>1</sup>, G. Lilitza<sup>2</sup>. <sup>1</sup>Hospital 60, Moscow, Russia; <sup>2</sup>Cytochemical and Molecular Pharmacology Institute, Moscow, Russia

**Background:** Eltacin (E) is a new antioxidant drug (Institute of cytochemical and molecular pharmacology, Moscow). It is represented the combination from 3 aminoacids: glutamin acid, glycine, cysteine and produced antioxidative, antianginal effects.

**Aim:** to investigate the influence of E on lipid metabolism in pts with postinfarction cardiosclerosis (PICS) in old pts.

**Material and methods:** 44 pts (mean age – 69.5 years old) obtained E in a dose of 220 mg sublingually  $\times$  3 times a day on the background of traditional therapy (TT). Control group (CG) of 21 pts received TT, including aspirin, beta-adrenoblockers, ACE-inhibitors, nitrates. 21 pts received placebo to E. Before and 20 days after therapy clinic, EchoCG, ECG-monitoring, redox-status in red cells were examined.

**Results:** data obtained indicated to hypolipidemic action of E. The

level of cholesterol decreased from  $8.4 \pm 0.3$  to  $7.6 \pm 0.3$  mmol/l ( $p < 0.05$ ), of triglycerides – from  $2.4 \pm 0.11$  till  $1.9 \pm 0.14$  mmol/l ( $p < 0.05$ ). In CG there was noted only decrease of cholesterol from  $6.9 \pm 0.3$  to  $6.0 \pm 0.2$  ( $p < 0.05$ ). Influence TT on triglycerides in CG was not revealed. Placebo to E was not changed the level of cholesterol and triglycerides. E produced reduction of oxidative stress and normalized balance in oxidant/antioxidant system.

**Conclusion:** E is more effective hypolipidemic drug, than TT and normalizing oxidant/antioxidant system.

## 225 EFFECTIVENESS OF EZETIMIBE "ADD-ON STATIN" TREATMENT OF HYPERCHOLESTEROLEMIA IN ROUTINE CLINICAL PRACTICE IN SLOVENIA

Z. Fras<sup>1,2</sup>, M.F. Kenda<sup>2</sup>. <sup>1</sup>Dpt of Vascular Medicine - Preventive Cardiology Unit, University Medical Centre Ljubljana, Slovenia; <sup>2</sup>Cardiovascular Research Centre, Slovenian Society of Cardiology, Ljubljana, Slovenia

**Objectives:** Treatment monitoring programme SI-SPECT (Slovenia) (SI) Statin Plus Ezetimibe in Cholesterol Treatment) was setup to evaluate the total as well as LDL-C lowering in pts treated with ezetimibe co-administered to on-going statin in daily clinical practice (S+E) and to what extent the target levels are achieved.

**Subjects and methods:** 1,067 pts with hypercholesterolemia (52% males, age 60.2 years, 42.9% with CHD, 32.0% diabetes, and 69.6% hypertension) were enrolled to initiate ezetimibe 10 mg plus continued prescribed statin. Baseline lipidograms were compared with those 12-16 weeks after the initiation.

**Results:** Significant positive changes were achieved due to S+E combination. Total and LDL cholesterol as well as triglycerides (TG) decreased significantly (by 25.3%, 31.4%, and 28.9% respectively,  $p=0.000$  for all comparisons). Monotherapy with ezetimibe resulted in 20.8% decrease of total and 28.0% decrease of LDL-C ( $p=0.000$ ); TG by 28.8% ( $p=0.016$ ). At the end 43.9% of pts achieved target total cholesterol levels, 50.5% of LDL-C, and 61.6% of pts TG levels (vs. 37.2% initially).

**Conclusions:** SI-SPECT programme showed that (1) combination S+E is very effective and safe, for total cholesterol, LDL-C, and TG lowering, (2) S+E is effective irrespective of statin used, (4) S+E combination assured much greater percentage of pts will reach target lipidogram levels. Greater lipid reductions than expected could possibly be due to highly and properly selected pts during the initial phase of ezetimibe use in Slovenia.

## 226 SUPEROXIDE ANION RADICAL, AN IMPORTANT TARGET FOR THE DISCOVERY OF ANTIOXIDANTS

S. Ali, M.I. Choudhary, A.U. Rahman. H.E.J. Research Institute of Chemistry, International Center for Chemical and Biological Sciences, University of Karachi, Karachi, Pakistan

It has been proved by a number of studies that free radicals are involved in various diseases. The positive aspect of these radicals in living system is cell signaling, but nevertheless their side reactions are very damaging. Reactive oxygen species (ROS) are produced by human body in various physiological processes, like mitochondrial oxidation, inflammation, metabolism of fatty acids and during neutralization of toxic species.

Superoxide anion radicals are involved in the onset various diseases such as cancer, cardiovascular diseases, immune system decline and diabetes. Among free radicals, superoxide involvement in diabetes has been thoroughly studied. It has an important role in the development and complications of diabetes. In diabetic conditions various sources of superoxide are activated like xanthine oxidases, NADPH oxidases, uncoupling of nitric oxide synthase (eNOS) and mitochondrial fuel oxidative processes. All these sources produce superoxide by various mechanisms under hyperglycemic conditions and hence it is known to be harmful for cellular components as a precursor of even more reactive oxidizing species.

By controlling the superoxide production, worsen conditions of diseases can be improved. Antioxidants have shown protective results for different diseases and their complications, therefore interest in this field is growing rapidly. During our studies a large number of natural and synthetic compounds have been screened using spectrophotometric "super oxide anion radical scavenging assay". Most exciting discoveries during the current studies will be reviewed in the poster.