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ABSTRACTS
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determine the relationship between stent restenosis and serum GGT activity, mostly within normal range.

Methods: In a retrospective study, we evaluated 1500 patients with the history of coronary stent implantation and of these, 120 patients (60 with and 60 without restenosis) who underwent control coronary angiography were randomly selected. Patients included in the study had baseline serum GGT activity prior to stent implantation, and free of systemic or hepatobilier disease. We investigated the relationship between serum GGT activity and the incidence of restenosis.

Results: The mean age of the study population was 58.56±10.46 years (81 male, 39 female). In the study population, mean baseline serum GGT activity was significantly higher in patients with restenosis (39.56±21.40u/L) than those without restenosis (23.63 ±11.18u/L) (p=0.000). This association was also observed after exclusion of patients with diabetes mellitus (p=0.000), hyperlipidemia (p=0.006), alcohol consumption (p=0.000) and those with abnormal C-reactive protein (CRP) (p=0.000) and alanine-aminotransferase (ALT) levels (p=0.000). Serum total bilirubin levels were significant higher (p= 0.037) and serum alkalene phosphatase levels were significant lower in patients with restenosis (p=0.029).

Conclusions: The serum GGT activity, mostly within normal range is a strong prognostic factor of stent restenosis. This association is independent of the history of diabetes mellitus, hyperlipidemia, alcohol consumption and the serum CRP and ALT levels.

Tu-P10:456 EFFECT OF VALSARTAN ON CRP, ADHESION MOLECULES AND URINE OXIDATIVE STRESS MARKERS IN TYPE2 DIABETIC SUBJECTS

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Objectives: To examine the effect of an angiotensin II type 1 receptor blocker, valsartan, on CRP, adhesion molecules and oxidative stress markers in Type 2 diabetic subjects.

Methods: Plasma levels of high sensitivity (hs)-CRP, IL-6, IL-18, VCAM-1, and I-selectin and urine 8-hydroxy-2-deoxyguanosine (OHdG) and 8-iso-prostaglandin F2 (PGF2alpha) are measured in 27 (18 male) Type 2 diabetic patients before and 3 months after 80 mg per day of valsartan treatment.

Results: Systolic blood pressure and HbA1c were suppressed after treatment, while plasma lipids and fasting blood glucose did not show significant changes. Hs-CRP tended to decrease from 0.23± 0.21 to 0.12 ± 0.11mg/dl (p=0.06). VCAM-1 and urine 8-OHdG decreased significantly (476±208 to 394 ± 133 ng/ml, and 12.6 ± 6.6 to 8.4 ± 3.7 ng/mg. Cr, p<0.006, by paired t-test). There were no significant changes in IL-6, IL-18, and I- selectin and urine 8-iso-PGF2alpha during the treatment. The decrease in VCAM-1 and urine 8-OHdG was still significant after excluding the 4 subjects who showed remarkable suppression of HbA1c after valsartan treatment.

Conclusions: Valsartan was effective in suppression of a plasma adhesion molecule and a urine oxidative stress marker in Type 2 diabetic patients. Further, this effect may not be induced by an improvement of blood glucose control.

Tu-P10:457 INFLAMMATORY MARKERS AND CAROTID INTIMA MEDIA THICKNESS (C-IMT) IN STABLE IHD PATIENTS

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Objectives: -role of a cohort of soluble markers among them and in relation to C-IMT changes in a 2 years follow-up;

-effect of moderate dose atorvastatin on time modifications both of markers and C-IMT.

Methods: MIAMI, an open, multicenter, independent study, enrolled 86 stable IHD patients, to receive atorvastatin (20 mg/daily) for 24 months. VCAM-1, ICAM-1, E-selectin, IL-6, -8, -10, -18, TNF-T, hs-CRP, MMP-9, TF, TFPI, CD40-L, vWF, Fg, TC, HDL, LDL, TG, urinary isoprostanes were measured at 0, 12 and 24 months, in parallel with C-IMT assessment.

Results: TC and LDL levels were at upper limits; HDL and TG were normal. HDL negatively correlated with ICAM-1 (p<0.0001), VCAM-1 (p<0.05), E-selectin (p<0.05), hs-CRP (p<0.05), IL-6 (p<0.059), whereas TG positively correlated with ICAM-1 (p<0.001), E-selectin (p<0.05), TF (p<0.05), TFPI (p<0.05) and CD40-L (p<0.05). Mean IMT was 0.89 ± 0.18 mm. C-IMT values were strictly and independently correlated with age. At univariate analysis E-selectin and TFPI were strongly correlated with IMT values at different carotid sites. hs-CRP and IL-6 were positively associated with CC-IMT mean and mean IMT, respectively. The multivariate analysis confirmed the association of E-selectin and TFPI with multiple C-IMT parameters, and the correlation between hs-CRP and CC-IMT mean.

Conclusions: Baseline data show a strong correlation between E-selectin and TFPI and C-IMT at different sites in stable IHD patients. The significance of these findings, the role of other markers and their relation with C-IMT changes will be the object of final analysis of the study, as well as the assessment of atorvastatin effects.

Tu-P10:458 GENETIC EFFECT OF CRP CONCENTRATION

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Introduction: Pro-inflammatory status measured by elevated concentration of high sensitivity C-reactive protein (hsCRP) in 200 probands with proved premature coronary atherosclerosis was analyzed as well as in member of their families.

Methods: All consecutive male patients n=200) admitted to the Cardiac Surgery Centre of the Regional Hospital in South Bohemia for CABG between May 2003 and October 2005 under 65 years of age were included in this study. Their anthropometric and biochemical data were analyzed at admission as well as in their spouses (n=193) and offspring (n=192). Aged matched controls were selected from a 1% representative population sample of the Czech population from the last survey of the WHO Czech MONICA Extension Study (in 2000-2001).

Results: In agreement with numerous studies, the hsCRP concentration of patients with proved coronary atherosclerosis was significantly higher (2.69±2.30 mg/l) compared to controls (n=400, (1.70±1.75 mg/l, p<0.001) in spite of the fact that 92% of patients were treated by statins at the time of admission. The HsCRP concentration did not differ between proband spouses and their population control. On the contrary, hsCRP concentration was significantly higher in 106 male offspring (n=106, (1.42±1.50 mg/l, p<0.002) compared to controls (n=106, (0.75±0.83 mg/l), as well as in female offspring (n=86, (2.15±2.46 mg/l vs. 1.38±1.67 mg/l, p<0.05).

Conclusion: The pro-inflammatory status in families with premature coronary atherosclerosis is genetically determined.

Tu-P10:459 INFLAMMATORY BIOMARKERS AND CAROTID ARTERY STENOSIS

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Objective: Atherosclerosis is associated with a microinflammatory response. The quantification of this response has significant therapeutic implications. We evaluated the relationships between inflammatory biomarkers, including the new erythrocyte aggregation (EA) test, and the degree of carotid artery stenosis in 510 individuals, some with vascular risk factors.

Methods: Four hundred and sixteen individuals did not have carotid stenosis (CS); 47 had mild to moderate CS (30-69%) and 47 had severe CS (>70%). We measured established biomarkers including the erythrocyte sedimentation rate (ESR), fibrinogen concentration, high sensitivity C-reactive protein (hs-CRP) and white blood cell count (WBCC). In addition, we used a simple slide test and image analysis to analyze the degree of EA.

Results: A significant correlation was noted between the degree of CS and the ESR, WBCC and fibrinogen (r=0.160, p=0.005; r=0.191, p=0.001 and r=0.126, p=0.026, respectively). The best correlation was found between the degree of CS and EA (r=0.209, p=0.000). The subjects with severe stenosis differed significantly from the other groups in their ESR, WBCC and EA. However, hs-CRP concentrations did not discriminate between the presence and absence of significant carotid atherosclerotic disease.

Conclusion: Inflammatory biomarkers with hemostatic properties such as ESR and the EA test are more sensitive than CRP to the presence of a significant atherosclerotic carotid burden. These biomarkers might aid in the detection and quantification of microinflammation in individuals with carotid atherosclerosis.

TUESDAY