FENOFIBRATE REDUCES C-REACTIVE PROTEIN IN NON-OBESE
CORRELATION OF THE LEPTIN:ADIPONECTIN RATIO WITH
EFFECT OF CYCLOOXYGENASE-1 POLYMORPHISMS ON
LAR is a useful biomarker of obesity-related insulin resistance. It negatively correlates with age and HDL-cholesterol concentrations. Multiple regression analysis showed that CRP was highly correlated with BMI (r = 0.551, p < 0.001), waist circumference (r = 0.211 1.82 vs. −0.89 1.92 mg/dL, p = 0.097). In patients with high density lipoprotein-cholesterol < 40 mg/dL, only fenofibrate group reduced CRP (p = 0.006).

Conclusions: Fenofibrate reduced CRP in non-obese hypertriglyceridemic patients. This group also achieved higher HDL cholesterol and lower triglycerides than the control group (−1.21 ± 1.82 vs. −0.89 ± 1.92 mg/dL, p = 0.097). In patients with high density lipoprotein-cholesterol < 40 mg/dL, only fenofibrate group reduced CRP (p = 0.006).

517 CORRELATION OF THE LEPTIN:ADIPONECTIN RATIO WITH INSULIN RESISTANCE-RELATED FACTORS IN JAPANESE MEN

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Methods: This case-control study enrolled 280 hypertriglyceridemic patients who were managed either with 200 mg of fenofibrate (Fenofibrate group, n = 140) or with general measures (Control group, n = 140). CRP levels were measured before and after 2 months of therapy.

Results: CRP decreased in both fenofibrate (p = 0.003) and control (p = 0.048) groups. Changes in CRP were not different between the two groups (−0.24 ± 1.56 versus −0.14 ± 1.69 mg/dL, p = 0.27) and were associated with baseline CRP levels (r = −0.47, p = 0.000). In patients with baseline CRP > 1 mg/dL, CRP also decreased in both groups (p = 0.000 and p = 0.001 respectively), however, more in the fenofibrate group than in the control group (−0.79 ± 1.90 versus −0.66 ± 1.77 mg/dL, p = 0.025). The reduction of CRP was associated with higher baseline CRP (r = −0.29, p = 0.001), lower body mass index (r = 0.23, p = 0.007), and fenofibrate therapy (r = 0.19, p = 0.025). CRP decreased more in the fenofibrate group than in the control group in patients with body mass index > 26 kg/m² with borderline significance (−1.21 ± 1.82 versus −0.89 ± 1.92 mg/dL, p = 0.097). In patients with high density lipoprotein-cholesterol < 40 mg/dL, only fenofibrate group reduced CRP (p = 0.006).

Conclusions: Fenofibrate reduced CRP in non-obese hypertriglyceridemic patients. This group also achieved higher HDL cholesterol and lower triglycerides than the control group (−1.21 ± 1.82 vs. −0.89 ± 1.92 mg/dL, p = 0.097). In patients with high density lipoprotein-cholesterol < 40 mg/dL, only fenofibrate group reduced CRP (p = 0.006).

519 DIFFERENTIAL INDICATORS ASSOCIATED WITH SUBCLINICAL CORONARY ATHEROSCLEROSIS IN SUBJECTS WITH OR WITHOUT METABOLIC SYNDROME


Objective: To determine the risk factors associated with subclinical coronary atherosclerosis (CA) assessed by coronary computed tomographic angiography (CTA).

Methods: From July 2004 to December 2008, 550 consecutive asymptomatic subjects without history of coronary artery disease received contrast-enhanced coronary CTA. Recognition of MetS was based on the ethnicity-modified National Cholesterol Education Program Adult Treatment Panel III (NCEP ATP-III) criteria. Any presence of coronary artery calcification (CAC) or the presence of noncalcified plaques within the proximal third major coronary artery segment(s) with zero CAC was defined as presence of CA.

Results: 38% (209/550) of all subjects met ethnicity-modified NCEP ATP-III MetS criteria. In addition to the clustering of multiple conventional cardiovascular risk factors in MetSyn subjects, MetSyn was independently associated with subclinical CA in multivariable analysis. (OR = 3.40, 95% CI 2.34 to −4.96, P < 0.001). Multivariable logistic regression analysis for risk factors association with subclinical CA revealed that fasting blood glucose > 6.11 mmol/L, diagnosis of diabetes mellitus was an independent indicator of subclinical CA in non-MetSyn subjects (OR = 1.40, 95% CI 1.08 to −1.82, P < 0.05) while TC/HDL-C > 4.2% was an independent indicator of subclinical CA in MetSyn subjects (OR = 4.44, 95% CI 1.93 to −10.20, P < 0.001).

Conclusions: Risk factors of subclinical CA in coronary CTA are different between subjects with and without MetSy defined by ethnicity-modified NCEP ATP-III. Fasting blood glucose/diagnosis of diabetes mellitus in non-MetSyn and TC/HDL-C in MetSyn are independent indicator associated with subclinical CA by coronary CTA study.

520 EFFECT OF CYCLOOXYGENASE-1 POLYMORPHISMS ON URINARY 11-DEHYDROTHROMBOXANE B2 LEVELS IN PATIENTS UNDERGOING STENT IMPLANTATION PRETREATED WITH ASPIRIN

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Objectives: Increased urinary levels of 11-dehydrothromboxane B2 (TxB2) was an independent indicator of subclinical coronary artery disease in non-MetSyn subjects (OR = 1.40, 95% CI 1.08 to −1.82, P < 0.05) while TC/HDL-C > 4.2% was an independent indicator of subclinical CA in MetSyn subjects (OR = 4.44, 95% CI 1.93 to −10.20, P < 0.001).

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518 PLASMA AMINOHOL PHIL PROFILE IN APPARENTLY HEALTHY SUBJECTS FROM THE AZORES ARCHIPELAGO, PORTUGAL

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The Azores Islands have the highest standardized mortality rate for cardiovascular diseases (CVD) as compared to mainland Portugal. Plasma aminohol profile (PAP), some of its major determinants (plasma folate, vitamin-B12 and vitamin-B6 concentrations and serum γ-GT activity), as well as its relationship with serum lipid profile, in apparently healthy subjects, all born and living in the Azores archipelago. Participants in this study (191 women and 142 men, aged 20 to 60 years) were split in two groups: one with a normal and another with an altered PAP (at least one aminohol concentration out of reference range). Plasma aminohol and vitamin-B12 were quantified by HPLC. The other parameters were determined by commercial kits. 76% of the participants had an altered PAP, mainly due to low GSH levels (<1.5 μM). That profile was worse in male gender, in older or hyperlipidemic subjects or in those with high γ-GT activity. Older subjects or hyperlipidemics showed decreased GSH and increased Cys levels and serum γ-GT activity, as compared to the respective counterparts. Hyperhomocysteinemia was present in 10% of participants, where only 33% had vitamin deficiencies. An altered PAP reflects a pro-oxidant status, thus favoring atherosclerosis and consequent CVD. Since subjects were apparently healthy, an altered PAP, namely originated by low GSH levels, can constitute an early marker of atherosclerosis.