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ABSTRACTS
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lated with IMT better in SP than in PP patients. In former smokers, a stronger negative correlation with years elapsed since smoking cessation was observed in SP than in PP patients. Although selected to be 10 years older, patients in PP showed a lower IMT than those in SP (0.93±0.33 vs 1.06±0.34; p=0.009). Similar results were obtained after patients stratification in never-, former and current-smokers. A general linear model confirms, after data adjustment for age, cig/die and conventional vascular risk factors, that both prevention level (p=0.012) and smoking habits (p=0.017) were independently associated with carotid IMT. No additive effect between prevention level and smoking habits was observed.

Conclusions: Prevention level is associated with a thickened carotid intima media complex independently of variables descriptive of smoking behaviour and other conventional risk factors. Smoking habit is an important determinant of carotid IMT both in primary and secondary prevention patients.

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Tu-P9:337 RELATIONSHIP BETWEEN CARDIOVASCULAR GLOBAL RISK IN PRIMARY AND SECONDARY PREVENTION AND CAROTID ATHEROSCLEROSIS

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Objective: To investigate whether the Framingham Risk Score (FRS) and the GISSI Risk Score (GRS), two algorithms useful to calculate the individual global risk in primary and secondary prevention, are associated with carotid artery intima media thickness (IMT) and IMT-progression, two parameters widely accepted as indexes of carotid and even coronary atherosclerosis.

Methods: 1205 asymptomatic and 262 symptomatic patients have been recruited to investigate the association between FRS, GRS and cross-sectional IMT. 404 patients with at least 5 years of follow-up (312 in primary and 92 in secondary prevention) were recruited to investigate the association between FRS, GRS and IMT-progression.

Results: While cross-sectional IMT significantly increases with the raising of quartiles of global risk of patients both in primary and secondary prevention (both p<0.0001; 4th vs 1st quartiles), IMT-progression is not associated with individual global risk neither in primary nor in secondary prevention.

Conclusions: FRS and GRS reflect the lifelong, but not the short term, evolution of atherosclerotic disease.

Funding: This study had no specific funding source.

Tu-P9:338 FLOW-MEDIATED VASODILATATION OF THE BRACHIAL ARTERY AND INTIMA-MEDIA THICKNESS OF CAROTID ARTERY IN NEVER-TREATED SUBJECTS

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Objective: Data on the association between brachial artery flow-mediated vasodilation (FMD) and common carotid intima-media thickness (IMT) are contrasting. The present study investigated the relationship between FMD and IMT and carotid atherosclerosis in never treated subjects.

Methods: Seventy-seven subjects were investigated: 46 had no coronary heart disease (CHD) risk factors, 21 had only one, and 10 had more than one risk factor. IMT was measured by ultrasonography and FMD was evaluated according to standardized methods.

Results: IMT increased with increasing number of risk factors (0.66±0.12, 0.69±0.12 and 0.80±0.17 mm, respectively, ANOVA p<0.05). FMD decreased with increasing number of risk factors (10.44±5.20, 6.52±7.11 and 7.35±4.42%, respectively, p<0.05). Endothelium-independent vasodilatation was similar in the three groups. IMT and FMD did not correlate neither in subjects without risk factors (r=-0.151, p=0.3), nor in those with 1 (r=-0.196, p=0.4) or with 2 or more risk factors (r=-0.387, p=0.2), while in the group as a whole the correlation was borderline significant (r=-0.217, p=0.058). Eleven subjects had carotid atherosclerosis and higher values of IMT, but not reduced FMD. In multiple regression analysis, diabetes and IMT, but not FMD, were associated with carotid atherosclerosis.

Conclusions: The present findings indicate that, in never treated subjects, FMD is not strictly associated with IMT or atherosclerosis of the carotid arteries.

Tu-P9:339 EFFECT OF PITAVASTATIN ON THORACIC AORTA IN HYPERLIPIDEMIA EVALUATED WITH INTEGRATED BACKSCATTER AND THICKNESS BY TRANSESOPHAGEAL ECHOCARDIOGRAPHY

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Objectives: The effect of Pitavastatin (P) therapy on normal lesion (NL) and plaque (PL) morphology in the thoracic aorta (TA) was evaluated in hypercholesterolemic patients by transesophageal echocardiography.

Methods: Integrated backscatter (IB) in the intima-media complex, wall thickness (Th) at the same site and hsCRP were measured before and after P therapy or diet alone (D) for 7 months (P: n=12, D: n=11). IB in NL were measured in 107 patients to estimate age-dependent changes. Corrected IB values (cIB) were determined by subtracting those of the tunica externa.

Results: cIB of NL significantly increased with age, (r=0.87). hsCRP was significantly decreased from 2.3±1.5 mg/L to 1.1±1.0 by P. T.chol was decreased from 234±25 mg/dL to 214±24 by D and significantly decreased from 240±30 mg/dL to 189±15 by P. cIB and Th of NL by D were significantly increased from -18.8±2.1 dB to -17.1±1.7 and from 1.6±0.5 mm to 1.8±0.5 respectively. Those by P were significantly decreased from -16.9±3.1 dB to -20.0±3.4 and from 1.7±0.3 mm to 1.5 ±0.3 respectively. cIB and Th of plaque by D were significantly increased from -9.5±3.7 dB to -7.4±3.5 and from 3.7±0.4 mm to 4.0±0.5 respectively. Those by P were significantly increased -10.6±3.3 dB to -6.7±3.3, but significantly decreased from 4.0±0.5 mm to 3.7±0.5, respectively.

Conclusions: Pitavastatin significantly decreased IB and Th in NL and significantly increased IB and significantly decreased Th in PL, suggesting that P decreased the conversion of NL to atherosclerotic lesion and induced a stabilization and regression of PL in TA in association with a reduction of hsCRP.

Tu-P9:340 CHRONIC USE OF LIGHT OR HEAVY CIGARETTES AND CAROTID IMT

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Objective: To evaluate the effect of chronic use of light or heavy cigarettes on carotid intima media thickness (IMT).

Methods: Data from 1113 never-, 377 former- and 315 current-smokers were analysed. Among 692 former/current smokers, 435 were light- and 257 were heavy-smokers (packyear≥30). 522 were users of high-nicotine (≥0.7mg) cigarettes, 615 of high-tar (≥7mg) cigarettes and 616 of high-carbon monoxide (CO) (≥7mg) cigarettes.

Results: Years of smoking and number of cigarettes smoked per day (Cig/die) correlated with IMT better than packyear. In former smokers, the years elapsed since smoking cessation (YESSC) was a strong determinant of lower IMT. These variables, together with traditional risk factors were used as covariates in the successive categorized analysis. IMT was higher in current- (1.07±0.25 mm) lower in former- (1.05±0.34 mm) and lowest in never-smokers (0.93±0.27 mm) (p<0.0001). Similarly, IMT was higher in heavy- (1.13±0.36 mm) lower in light- (1.01±0.26 mm) and lowest in never-smokers (all p<0.0001). On average, even after data adjustment for confounders, no difference in IMT was observed when low-nicotine vs high-nicotine or low-tar vs high-tar or low-CO vs high-CO cigarettes consumers were compared.

Conclusions: Light and heavy cigarettes have the same proatherogenic effect. Packyear, Cig/die, years of smoking and YESSC (in former-smoker) are important covariates that have to be taken into account when smoking habit is considered as vascular risk factor.

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Tu-P9:341 THE ATHEROSCLEROTIC BURDEN, ASSESSED BY CAROTID ULTRASONOGRAPHY, IN LOW-RISK PATIENTS WITH DYSLIPIDEMIA

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Objectives: To investigate the potential benefits of screening for atherosclerotic burden in low-risk patients with dyslipidemia, in term of prevalence of carotid plaque detected by B-mode ultrasonography.

TUESDAY