P6.10: ALCOHOL INTAKE IS ASSOCIATED WITH 24-HOUR AORTIC BLOOD PRESSURE IN A YOUNG HEALTHY STUDENT COHORT

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cardiovascular disease in SCT remains to be determined. The present study sought to determine the arterial stiffness, an independent marker of subclinical atherosclerosis, between SCT and trained SCD.

Results: Patients and controls were similar in age, gender and BMI, but patients had greater aPWV, Framingham risk score and vascular age which remained after adjustment for age, and MAP. In COPD, Framingham risk related to age r = 0.295, aPWV r = 0.234, SBP r = 0.194 and FEV1% predicted r = 0.112, (all p < 0.01). In controls, Framingham risk score related only to age r = 0.383, aPWV r = 0.189 and systolic BP r = 0.195 (p < 0.05).

Conclusions: The association between the Framingham risk score and aPWV suggests that either may be useful to identify individuals with COPD at risk of future CV events. Further follow-up of this cohort will evaluate the prognostic utility of these measures of CV risk.

P6.12 AORCITIC AND LOCAL CAROTID STIFFNESS: RELATIONSHIP WITH CARDIAC AND VASCULAR ORGAN DAMAGE IN A GENERAL POPULATION SAMPLE IN NORTHERN ITALY

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Background: Carotid-femoral pulse wave velocity (aPWV), the gold-standard measurement of arterial stiffness, has been found associated with cardiac and vascular organ damage. Less information is available with regard to the correlation between local carotid stiffness (CS) and cardiac and vascular preclinical damage.

Aim: of the study was to analyse the correlation between aoPWV and CS and cardiac and vascular preclinical organ damage in a middle age general population sample in Northern Italy (Vobarno Study).

Methods: 245 subjects (57% female, age 56±4 years) underwent laboratory examinations, clinic and 24 hours BP measurement, cardiac and carotid ultrasound, aPWV measurement (Complior-system). CS was determined from the relative stroke change in diameter (measured with a high-resolution echotracking system) and carotid pulse pressure (measured with application tonometry) and was expressed in the same dimensions as pulse wave velocity (m/s).

Results: Both aoPWV and CS were significantly related with age (r = 0.29, p < 0.001 and r = 0.23, p < 0.001, respectively). A positive correlation was observed with clinic and 24 hours blood pressure parameters and both aoPWV and CS. AoPWV was significantly related to left ventricular mass index (LVMi, r = −0.20, p < 0.05), and was significantly higher in subjects with LV hypertrophy (LVMi > 115 g/m2 in men and > 95 g/m2 in women) as compared to subjects without LVH (9.1±1.5 vs 8.5±1.4 m/s, p < 0.05). On the contrary, CS was not related with LVMi and no difference in CS was observed between subjects with or without LVH (5.6±1.5 vs 6.3±1.2, p = ns). AoPWV was also significantly related to vascular organ damage(carotid IMTmaxmax = 0.16, p < 0.05; CBMI = 0.19, p < 0.05). Conclusion: Although carotid-femoral pulse wave velocity (AoPWV) and carotid stiffness provided similar information on the impact of aging and blood pressure on large artery stiffness, only AoPWV, and not CS, is related to cardiac (LVM) and vascular (IMT) damage in a general population sample.

P6.13 AMBULATORY AND OFFICE CENTRAL SYSTOLIC BLOOD PRESSURE IS MORE CLOSELY ASSOCIATED WITH LEFT VENTRICULAR MASS THAN AMBULATORY AND OFFICE PERIPHERAL SYSTOLIC BLOOD PRESSURE IN A YOUNG NORMOTENSIVE POPULATION

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Background: High blood pressure (BP) at a young age and increased left ventricular mass (LVM) are associated with increased risk of future cardiovascular mortality. In addition, ambulatory 24-hour central systolic BP (24sSBP) is more closely associated with LVM than either 24-hour peripheral SBP (24pSBP) or office measurements of 24pSBP and cSBP. However these associations have only been observed in older hypertensive patients. The purpose of this study was to determine (1) if BP was associated with LVM, and (2) which