L017

THE ASSOCIATIONS BETWEEN SOME RISK FACTORS & BLOOD PRESSURE IN MEN WITH ESSENTIAL ARTERIAL HYPERTENSION. SA Matveeva. Medical University, Ryazan, Russia.

The aim of our research is the study of the relationship between the impact of risk factors such as smoking, alcohol, stresses & blood pressure (BP) in men with arterial hypertension (AH) & hereditary inclination to AH. We examined 60 men (mean age 54.8 +/- 12.6) with moderate AH (WHO stage 11) in the period of stabilization of AH. The programme included a detailed case study, laboratory & instrumental methods. The results showed that the duration of smoking equalling 28.06 +/- 0.95 years was significantly associated with systolic BP - SBP (r = 0.91, p<0.001), & diastolic BP - DBP (r = 0.91, p<0.001) in 48 patients; the duration of the usage of alcohol equalling 26.69 +/- 1.06 years was significantly associated with SBP (r = 0.96, p=0.001) & DBP (r = 0.95, p<0.001) in 51 patients; the duration of stresses equalling 22.75 +/- 0.99 years was also significantly associated with SBP (r = 0.98, p<0.001) & DBP (r = 0.93, p<0.001) in 20 patients. It is concluded that the results of the research testify to the relationship between the duration of the effects of smoking, alcohol, stresses & the mean levels of SBP & DBP in men with essential AH & hereditary inclination to AH.

Key Words: smoking, alcohol, stresses, blood pressure, arterial hypertension

L018

DISTRIBUTION OF DIFFERENT HLA ANTIGENS IN GREEK HYPERTENSIVES ACCORDING TO THE ANGIOTENSIN-CONVERTING ENZYME GENOTYPE. EJ Diamantopoulou, E A Andreadis, C B Vassilopoulou, M G Tsiaklis-Kallos, M E Vlachokostk, C Papasteriadis* 4th Department of Internal Medicine & *Histocompatibility Department of Evangelismos Hospital, Athens, Greece

The role of the angiotensin-converting enzyme (ACE) in controlling blood pressure through the renin-angiotensin system is well established. Although the genotype of this enzyme has not been associated so far with the prevalence of arterial hypertension, numerous reports suggest a relationship between this genotype and the cardiovascular complications that occur in hypertensive subjects. Epidemiologic studies among different populations have shown an increased frequency of certain HLA phenotypes in hypertensives. The aim of this study was to investigate the existence of phenotypic variations of HLA antigens in association with the ACE genotype in Greek hypertensives compared to normal individuals.

Subjects and methods: We have studied 94 subjects (49 men, 45 women), aged 17-73 years (mean age 52.3i13 years), with newly diagnosed essential hypertension as well as 104 randomly selected, age and sex matched normotensive individuals. The determination of the ACE genotype was performed by the PCR technique. HLA-A and -B antigens were determined in peripheral lymphocytes, while HLA-DR antigens were studied by using specific antiserums. We have evaluated the association of specific HLA antigens with the different ACE genotypes, both among hypertensives and the control subjects.

Results: The prevalence of the different genotypes of the ACE gene did not differ significantly between the hypertensives and the normal individuals. Hypertensives with the DD genotype were characterized by an increased frequency of the HLA-A2 (p<0.005) and DRB1 (13) (p<0.01) in comparison to normotensives with the DD genotype. HLA-A24 was found more frequently among the hypertensives with the ID genotype than in the normal controls with the same genotype (p<0.05).

Conclusions: The findings of this study show that in Greek hypertensive subjects the ACE genotype is associated with the HLA phenotype -A2, -A24 and DRB6. This could proved to be of clinical importance with a significant prognostic value since the ACE genotype DD has been shown to be related to an increased incidence of cardiovascular events among hypertensives.

Key words: Essential hypertension, ACE genotype, HLA.