

Background and Aims: Nowadays interrelationship of metabolic abnormalities which connect with elevated blood pressure (BP) has been studied mainly among people of advanced age. Aim - to study some indicators of metabolic status depending on BP among young men.

Methods: 3 preventive screening was conducted among 81 boys 18-24 years old. In first group (n=30) were people with optimal and normal BP, in the second group (n=23) - high normal BP, in third group (n=28) - arterial hypertension (AH). Anthropometry, office BP measurement, lipidogram on CardioChek PA (USA) were performed with the definition of indicators: total cholesterol, low-density lipoprotein, high-density lipoprotein and triglycerides. The analysis of material was carried out using package of statistic program ANOVA.

Results: It turned out that overweight in these groups was 26.6%, 43.4% and 50.0%, respectively. The differences between the first and third groups were almost twofold and quite reliable ($p < 0.005$). The following dynamics of the triglycerides from first to third group was noted: 1.3 ± 0.15 , 0.93 ± 0.13 and 1.45 ± 0.02 mmol/l. That is, the highest rates of triglycerides are present in groups with extreme values of BP levels. In other words, the trend of changes in this parameter, depending on BP, approaches the U-shaped curve. The remaining lipid status did not show any significant changes with an increase of BP.

Conclusions: In young men elevation in BP combines with increase in their body weight and hypertriglyceridemia. The remaining parameters of lipid profile at this age, despite increase in BP and extra body weight remain without any special changes.

659 / #1103, POSTER, 3. DYSLIPIDEMIA AND RISK FACTORS / 3.6 GENDER AND CARDIOVASCULAR RISK, 10-05-2020 8:30 AM - 7:00 PM. DISTRIBUTION OF FAMILIAL HYPERCHOLESTEROLAEMIA ACCORDING TO GENDER AND DLCN SCORE IN LITHUANIA

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Background and Aims: Familial Hypercholesterolaemia (FH) is one of the most common single-gene variant disease causing premature cardiovascular morbidity and mortality. American Heart Society states that men and women are affected equally by Familial Hypercholesterolaemia. The aim of this study was to identify the distribution of FH in Lithuania between men and women.

Methods: during the period of 2018-2019 we have investigated 100 people with clinically diagnosed FH according to Dutch Lipid Clinic Network (DLCN) criteria in Vilnius University Hospital Santaros Clinics. All patients underwent a thorough medical history and laboratory testing. We have divided patients into four groups according to DLCN score: definite FH, probable FH, possible FH and unlikely FH. Using DLCN criteria, we categorized patients according to the risk of FH morbidity.

Results: Out of 100 patients 48 were men (48%) and 52 women (52%), $p = 0.017$. The mean age at diagnosis was 46.3 (43.3 for men and 49.0 for women), Table 1. According to DLCN criteria definite FH diagnosis was set for 14 patients (14%), probable FH was diagnosed for 55 patients (55%), possible FH diagnosis was set for 29 patients (29%) and 2 patients (2%) were included into unlikely FH diagnosis group.

Conclusions: The first results of Familial Hypercholesterolaemia screening programme in Lithuania showed that FH is statistically significant more common in women than in men. FH is diagnosed in early age (less than 50 years in both genders) and most people have probable FH at the time of diagnosis according to DLCN criteria.

660 / #318, POSTER, 3. DYSLIPIDEMIA AND RISK FACTORS / 3.6 GENDER AND CARDIOVASCULAR RISK, 10-05-2020 8:30 AM - 7:00 PM.

DYSLIPIDEMIA AND PRE-DIABETES – BURDEN AND GENDER DIFFERENTIALS AMONG RURAL POPULATION IN INDIA

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Background and Aims: There is limited literature on gender as a determinant of relationship between dyslipidemia and pre-diabetes among rural populations in developing countries. **Objective** To determine gender based differences in relationship between dyslipidemia and pre-diabetes among rural population in India

Methods: A cross sectional study was conducted in rural villages in Northern India among 1005 adult subjects aged more than 18 years who were selected by systematic random sampling method. Data was collected using WHO-STEPPS questionnaire and all participants were subjected to anthropometry, plasma glucose estimation and lipid profile assessment using validated procedure in laboratory. Data was analysed using SPSS software. Chi-square/fisher exact or T test/Mann Whitney tests were used to find any statistical significance. Institutional ethical clearance was taken for the study and written informed consent was taken from all participants.

Results: The prevalence of hypercholesterolemia (8.8%) and hypertriglyceridemia (11.2%) was significantly ($p < 0.05$) higher among pre-diabetes patients as compared to non pre-diabetes patients. A total of 3.2% males and 3.6% females were found to have pre-diabetes ($p > 0.05$). Among patients of pre-diabetes, dyslipidemia was significantly higher among females than males ($p < 0.05$). The odds of hypertriglyceridemia was 4.12 ($p < 0.05$) among obese females as compared to non-obese females while no such relationship was found in male gender.

Conclusions: There was significantly high burden of dyslipidemia among obese female patients with pre-diabetes. Dyslipidemia should be screened in all pre-diabetes patients and weight management should be enforced.

661 / #1706, POSTER, 3. DYSLIPIDEMIA AND RISK FACTORS / 3.6 GENDER AND CARDIOVASCULAR RISK, 10-05-2020 8:30 AM - 7:00 PM. GENDER SPECIFICITIES OF THE UKRAINIAN FAMILIAL HYPERCHOLESTEROLEMIA REGISTRY

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Background and Aims: To estimate gender-specific differences of patients with possible familial hypercholesterolemia (FH) ($LDL-C \geq 5$ mmol/l) based on the data of the Ukrainian FH Registry.

Methods: As of September 2019, 178 patients (170 adults and 8 children) were included into the Ukrainian FH Registry. The patients underwent the investigations as follows: lipid and glucose profile, ECG, coronary angiography.

Results: While comparing the data, clinical characteristics of men were found to be significantly more severe than those of women of the comparable age (44.3 ± 1.7 years in men and 46.6 ± 1.1 years in women). A higher percentage of men were identified to have xanthomas (21.7% in men versus 10.5% in women), early development of CVD (56.5% vs. 41.1% in women), myocardial infarction (10.9% vs. 3.22% in women). Men also had a higher DLCN score of 7.4 ± 0.5 vs. 6.3 ± 0.3 in women and lipid profile values such as total cholesterol- 9.3 mmol/l ± 0.4 , LDL-C- 7.2 mmol/l ± 0.4 in men versus -9.1 mmol/l ± 0.3 and 7.1 mmol/l ± 0.3 in women, respectively. These gender-specific differences may be attributed to the fact that the majority of women were of reproductive age and a significant predominance of smoking among men: 32.6% versus 8.06%.

Conclusions: As compared with female FH patients of reproductive age, males were found to have higher incidence of xanthomas, earlier development of CVD, higher incidence of myocardial infarction, as well as total cholesterol and LDL-C, which is likely to be associated with smoking.