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ABSTRACT BOOK

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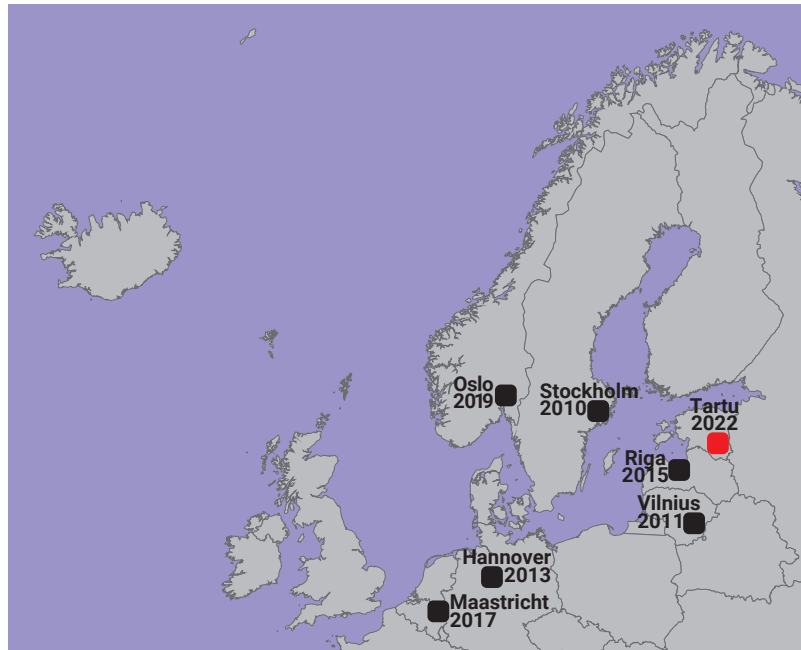
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Vascular Rehabilitation – the Journey from Causes to Results

Tartu, Estonia
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Abstract book



Baltic & North Sea Conferences on PRM



POSTER PRESENTATIONS

2. Cardiovascular complications

PP 01

FUNCTIONAL FOOD IN COMPLEX REHABILITATION OF CORONARY HEARTS DISEASE PATIENTS: GENDER DIFFERENCES*Alexander Plakida, Olga Yuschkovska**Odessa National Medical University, Odessa, Ukraine*

Cardiovascular diseases are the most prevalent and occupy first place in the structure of morbidity and mortality in developed countries. One of the promising directions of current research is the use of functional foods in complex rehabilitation. We observed 60 patients with cardiac heart disease at the stage of sanatorium rehabilitation. Twenty-eight patients (46.7%) were men and 32 (53.3%) – women. Mean age of patients - (52.2±2.4). A control group (30 persons) received the standard range of spa treatments which include: diet therapy, climato-therapy, gymnastics, magnetotherapy. The main group of patients (30 people), in addition to the standard complex, received functional food including L-carnitine, taurine, inositol, choline, coenzyme Q10. Investigations before and after the courses include anamnesis, dynamic clinical observation of objective and subjective condition, laboratory diagnostics (general clinical research, lipidogram, coagulogram, liver function tests, transaminase), instrumental methods of investigation (measurement of blood pressure, electrocardiogram in 12 standard leads, Holter ECG daily monitoring, assessment of the quality of life (questionnaire WHOQOL-100). The spa treatment with the inclusion of functional foods in patients with cardiovascular disease has a pronounced positive effect on clinical manifestations in reducing of the main symptoms of the disease, reducing ectopic myocardial activity, improving coronary blood flow, and myocardial perfusion unidirectional regardless of gender. At the same time, when assessing the quality of life in men, probable increases were registered in all four areas: physical ($p<0.01$), psychological ($p<0.01$), independence ($p<0.05$), and social life ($p<0.05$). In women, in contrast to men, significant changes were registered in two of the four areas - physical and psychological; changes in independence and social were not statistically significant.

3. Diabetes mellitus

PP 02

RISK OF METABOLICALLY UNHEALTHY OBESITY IN CHILDREN ASSOCIATED WITH LACTASE AND MCM6 GENES*Aleksandr Abaturov, Anna Nikulina**Dnipro State Medical University, Dnipro, Ukraine*

Background. Lactase deficiency associated with single nucleotide variants (SNVs) of the lactase (LCT) and minichromosome maintenance complex component 6 (MCM6) genes is the trigger that initiates meta-inflammation.

Aim: to study the role of SNV LCT, MCM6 to the development of in metabolically unhealthy obesity (MUO) in children.

Materials and methods. 42 obese children aged 6-18 years old were examined using whole genome sequencing (CeGat). The main group ($n=27$) was represented by children with MUO. The control group ($n=15$) consisted of children with metabolically healthy obesity (MHO). To verify the results of the study, the analysis of nominal data was used, the strength of the relationship between the risk factor and the formation of MUO was assessed by calculating the Cramer criterion (V), Pearson's contingency coefficient (C), the normalized value of Pearson's coefficient (C').

Results. Among obese children revealed 20 SNV LCT and 11 SNV MCM6. Odds ratio (OR) at MUO to detect SNV LCT A/G rs3213891 – 1.75 95% CI 0.17-18.4; G/A rs3213890 -2.5 95% CI 0.65-10.06; C/T

rs3754689 – 3.4 95% CI 1-13.6; SNV MCM6 G/A rs1057031 – 2.6 95% DI 0.65-10. The estimate of the strength of association between SNV LCT and MUO in A/G rs3213891 genotype is weak ($V=0.073$; $C=0.072$; $C'=0.102$); with genotypes G/A rs3213890 ($V=0.284$; $C=0.273$; $C'=0.386$); C/T rs3754689 ($V=0.278$; $C=0.268$; $C'=0.379$); SNV MCM6 G/A rs1057031 ($V=0.143$; $C=0.142$; $C'=0.201$) is moderate ($p<0.05$).

Conclusions. The greatest contribution to the development of MUO is the following three genotypes A/G rs3213891; G/A rs3213890; C/T rs3754689 and SNV MCM6 G/A rs1057031.

Funding. The work is a fragment of the research work of the Dnipro State Medical University "Prediction of the development of childhood diseases associated with civilization" (No 0120U101324), funded by the Ministry of Health of Ukraine from the state budget.

Keywords: obesity, children, lactase gene, Minichromosome maintenance complex component 6 gene

4. Lower extremity peripheral artery disease and amputations

PP 03

FOUR MONTH STUDY OF INPATIENT REHABILITATION FOLLOWING DYSVASCULAR LOWER EXTREMITY AMPUTATION*Helena Gapeyeva, Eve Sooba, Kelly Kirt, Heidi Alasepp, Meeli Mumma**Clinic of Medical Rehabilitation, East Tallinn Central Hospital, Tallinn, Estonia*

Objective: Cases of dysvascular lower extremity amputation (LEA) have a tendency to increase. Main objective was to describe rehabilitation periods, treatment duration and kinds of four month inpatient treatment for a cohort of patients with dysvascular LEA.

Design: A retrospective cohort study.

Setting: Clinic of Medical Rehabilitation in East Tallinn Central Hospital

Patients: Twenty-eight patient data (14.3% women, age mean and SD, 70.3±10.0 years), who received inpatient treatment after dysvascular LEA, were included in the analysis.

Methods and Main Outcome Measures

Patients following dysvascular LEA underwent early post-operative rehabilitation or rehabilitation including prosthetic training after multidisciplinary team estimation at treatment initiation and before discharge. Rehabilitation stage, its duration and specific intervention modes were tracked. Descriptive statistics was performed to analyse received data.

Results and Discussion: During the four month study period, a total of forty-eight patients underwent treatment following dysvascular LEA, twenty eight (58.3%) of them received inpatient treatment, three (6.3%) outpatient treatment and 17 (35.4%) prosthetics related consultations.

Eleven inpatient department patients with dysvascular LEA (39,3%) participated in post-operative early stage rehabilitation, other patients participated in rehabilitation with prosthetic training. Most of patients had unilateral transfemoral amputation (75%) and unilateral transtibial amputation (21.4%), one patient had combination of transfemoral and transtibial amputation (3.6%). Mean period of postoperative early stage rehabilitation initiation after surgery was 17.5±15.6 days, and duration of treatment 10.6±6.1 days. Physiotherapy, occupational therapy, prosthetist's and psychologist's as well as social worker consultations were provided. In a previous study there were no or low correlations noted between performance-based and self-report changes in functional mobility from initial exam to discharge with rehabilitation intensity measures (Christiansen et al, 2015).

Conclusions: Most of the patients of the inpatient department were men after dysvascular transfemoral amputation, who underwent a prosthetic training phase of rehabilitation, including multidisciplinary