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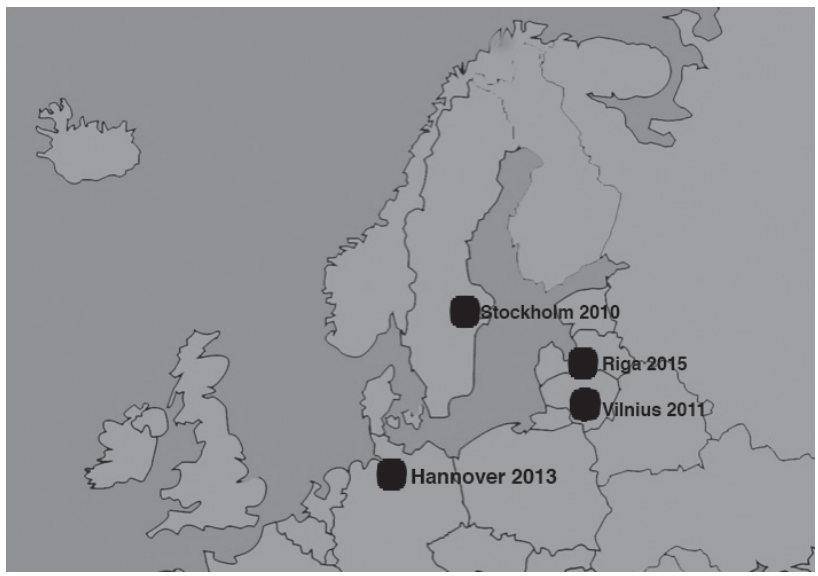

Baltic & North Sea Conferences on PRM

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steps climbed. The study involved 20 patients with 64±9.9 years, 80% men, with a length of stay of 18.6 days on cardiology ward, between September 2013 and April 2014, with an average of 4.4 program sessions. Data obtained in LCADL (29.9±8.9 vs 20.9±6.8), exercise parameters and Borg score after the exercise showed a positive variation, meaning that patients improved their functional capacity along the program, despite being in acute phase of heart failure. Descriptive and inferential statistics analysis of the data allows us to conclude that patients with previous practice of exercise, lower basal heart rate, higher oxygen saturation, lower number of associated cardiovascular risk factors presented a better response to the exercise and with a better evolution throughout the program.

PP39

FUNCTIONAL TRAINING – EFFECTS ON BLOOD PARAMETERS IN HEMODIALYZED PATIENTS

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Chronic kidney disease (CKD) is characterized by a progressive and irreversible decline in kidney function and that affects all other organs and systems. Patients with CKD on hemodialysis have reduced functional capacity and sedentary behavior, which results in increased morbidity and mortality. Over the past few years programs have been developed and implemented to maximize functionality with demonstrated beneficial effects in this specific population. Changes in the blood profile, resulting from these intervention programs, are not yet sufficiently studied. The objective of this study is to analyze the changes in the blood profile of the hemodialyzed patients after the implementation of a training program to maximize functionality. To achieve this objective a causal comparative research at a hemodialysis clinic was started. 24 individuals (intervention group) were included in a program of aerobic training (exercise bike and treadmill) before hemodialysis and 27 maintained their usual routine (control group). Anthropometric measurements (weight, height, body mass index) and functional capacity (sit-to-stand test, up and go test and handgrip strength test) were taken before and after the exercise program; the blood profile was monitored (leukocytes, neutrophils, hemoglobin and hematocrit, urea, creatinine, albumin, sodium, potassium, calcium, phosphorus, iron, iron-binding capacity, ferritin, glucose and parathormone) monthly throughout one year. The duration of hemodialysis, the administered dosage of darbepoetin and the adequacy ratio of hemodialysis treatment were assessed. The exercise program proved to be decisive on improving the functional capacity of these patients which translates into clear gains in autonomy to performing activities of daily living. In the intervention group the darbepoetin administration dosage has decreased, keeping the anemia parameters unchanged, which is an advantage for patients and reduces treatment costs. For other analytical parameters studied, it was not possible to establish effective relationship with the implementation of the exercise program. However, this variability was observed in both groups, which seems to indicate that the program had no adverse effects on these parameters and particularly in the dialysis efficacy. Hemodialyzed patients will benefit of rehabilitation care, with programs to maximize functionality, in daily treatment, therefore rehabilitation professionals must take part on multidisciplinary teams in hemodialysis clinics.

PP40

EARLY MOBILIZATION AND EXERCISE IN ELDERLY PATIENTS AFTER CORONARY ARTERY BYPASS GRAFTING

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Introduction: Coronary Artery Bypass Grafting (CABG) is one of the most commonly performed surgical procedures. During the postoperative period, the prolonged bed rest increases the possible occurrence of systemic complications, resulting from immobilization. *Aim:* This quasi-experimental study aims to analyze the hemodynamic variables and the peak expiratory flow (peak flow) during the application of two different exercise protocols (with and without passive exercise peddler) compared with the traditional intervention (non-invasive ventilation) in elderly patients after Coronary Artery Bypass Grafting. *Methods and material:* Thirty elderly patients, in postoperative care of CABG, were organized into three groups: Group A – which performed the exercise in a passive exercise peddler; Group B – which performed motor physical therapy without using the exercise peddler; and Group C – with non-invasive ventilation. Considering a 5% significance level ($p<0.05$) the Shapiro Wilk's test for normality analysis was performed and then a descriptive analysis of the sample was made. To analyze the variation of the results in each group before and after test Wilcoxon's test was performed. Finally, to analyze and to compare the three groups before and after test, the Kruskal Wallis test was performed. *Results:* The results showed a significant increase in Peak Flow values in the three groups (before and after test), a significant reduction of systolic blood pressure in group A, and increase of cardiac frequency and respiratory frequency in group B. In the analysis between groups, it was observed a significant reduction of diastolic blood pressure in group C. It is concluded that early mobilization and exercise, with or without the exercise peddler, can be safe and performed in elderly patients after CABG in the Intensive Care Unit (ICU). Careful use of positive pressure in the non-invasive ventilation is needed due the effects on blood pressure and cardiac debit.

PP41

MULTIDISCIPLINARY APPROACH TO REHABILITATION OF CARDIAC PATIENTS

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Background: In recent years high-tech methods of treating patients with cardiovascular diseases are being developed in cardiology. At the same time rehabilitation has become even more important. *Methods:* Specialists of Ivanovo State Medical Academy (ISMA), in collaboration with the State Research Centre for Preventive Medicine, have developed a program for the second stage of complex rehabilitation of patients with cardiovascular diseases. The program is designed for patients with acute coronary syndrome and/or percutaneous coronary intervention, its duration being 21 days. The basis of physical rehabilitation is composed of a complex of therapeutic exercises, training on cardiac simulators of «KardioMed-700» series (Germany), dosed walking and climbing stairs. Depending on the functional class of stenocardia, trainings were conducted in two modes (moderate and semi-moderate). While implementing the cardiorehabilitation program a multidisciplinary approach was used. Previously such an approach was successfully applied in neurorehabilitation of patients with an ischemic stroke. A multidisciplinary team examined all patients on admission, on the 7th, the 14th and the 21st day in the following order: a cardiologist, a therapeutic physical trainer, a psychologist, a psychotherapist, a physiotherapist, a nutritionist. For each patient an individual rehabilitation program was developed as a result of the joint work of specialists of a multidisciplinary team. Testing and analysis of the