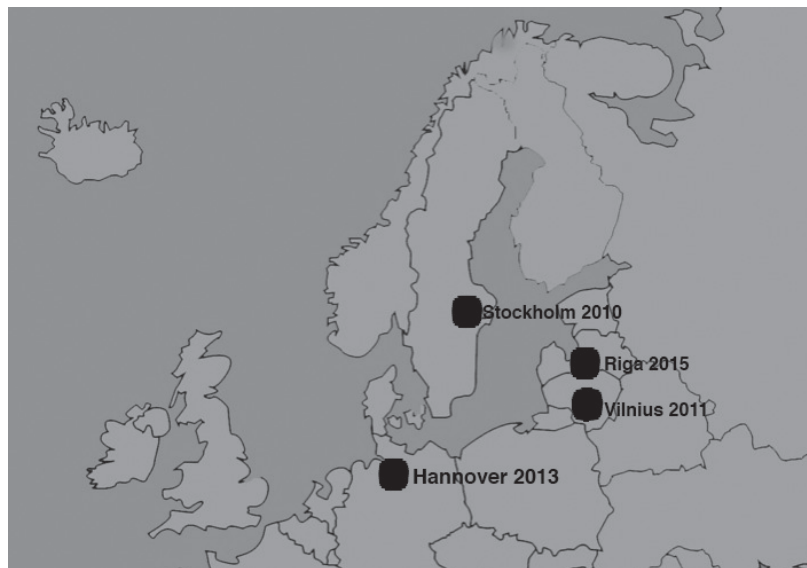


# 4<sup>th</sup> Baltic and North Sea Conference on Physical and Rehabilitation Medicine

*Riga, Latvia*  
*September 16–18, 2015*



**Baltic & North Sea Conferences on PRM**

## **TABLE OF CONTENTS**

Immunology and Rehabilitation	767
Communication in rehabilitation teams	767
Avoiding monoprofessional thinking in teamwork	767
Rehabilitation across borders – round table discussion	768
Communication and assistive devices	768
Acceptance & Commitment Therapy (ACT) as a first line intervention for lifestyle changes to treat and prevent chronic changes	768
Habilitation – transition from childhood to adulthood	769
Robotics and rehabilitation	770
Journal of Rehabilitation Medicine Symposium: Stroke rehabilitation	771
Qualitative research in rehabilitation medicine	771
Dysphagia management	773
Free oral presentations	774
Poster presentations	784
Author index	800

**Conference President**

Professor Aivars Vētra, Riga

**President of Baltic and North Sea Forum**

Professor Aivars Vētra, Riga

**Vice president of Baltic and North Sea Forum**

Professor Kristian Borg, Stockholm

**Abstract Review Committee**

Jan Ekholm, Kristina Schüldt Ekholm (SE) (chairpersons)  
Guna Berzina (LV) (secretary)  
Frans Nollet, Katharina Stibrant Sunnerhagen, Michael Quit-  
tan, Roary O'Connor, Boya Nugraha, Anne Chamberlain, Anita  
Vetra, Alvydas Juocevicius, Jaan Korgessar, Jan Lexell, Ulrich  
Smolenski, Jürgen Linder

**The conference is organized by**

Baltic and North Sea Forum on Physical & Rehabilitation Medi-  
cine (BNF-PRM) in cooperation with Riga Stradins University,  
Karolinska Institutet, Stockholm and Latvian Rehabilitation  
Board.

**Scientific Committee**

*Chairman:*

Kristian Borg (SE)

*Members:*

Guna Berzina (LV)  
Matthias Bethge (DE)  
Gunilla Brodda-Jansen (SE)  
Anne Chamberlain (GB),  
Alain Delarque (FR)  
Jan Ekholm (SE)  
Gunnar Grimby (SE)  
Christoph Gutenbrunner (DE)  
Galina Ivanova (RU)  
Ieva Eglė Jamontaitė (LT)  
Alvydas Juocevičius (LT)  
Olga Kamaeva (RU)

Carlotte Kiekens (BE)  
Jaan Korgessar (EE)  
Aleksandras Krisciunas (LT)  
Ireneusz Marek Kowalski (PL)  
Angela McNamara (IR)  
Thorsten Meyer (DE)  
Frans Nollet (NL)  
Boya Nugraha (DE)  
Jozef Opara (PL)  
Anselm Reiners (DE)  
Tiina Rekand (NO/EE)  
Kristina Schüldt Ekholm (SE)  
Bengt Sjölund (DK)  
Katharina Stibrant Sunnerhagen (SE)  
Henk Stam (NL)  
Johan K Stanghelle (NO)  
Guy Vanderstraeten (BE)  
Anthony Ward (GB)  
Aivars Vētra (LV)  
Anita Vētra (LV)

**Local Organising Committee**

*Chairman:*

Aivars Vētra (Chairman), Guna Berzina (Secretary), Anita Vētra,  
Signe Tomsone, Daina Šmite, Andreta Slavinska

**Congress Organisation**

Latvia Tours, Riga

**Board of Baltic & North Sea Forum, BNF-PRM**

Aivars Vētra (President), Kristian Borg (Vice President), Alvydas  
Jucevicius, Anne Chamberlain, Ireneusz Kowalski, Gunilla  
Brodda Jansen, Boya Nugraha.

**Advisory Board of BNF-PRM**

Christoph Gutenbrunner (Chairman), Jan Ekholm, Kristina  
Schüldt Ekholm, Alain Delarque, Anthony Ward

effectiveness of the program were conducted at the ISMA clinic. *Results:* At the end of the three-week program of cardiorehabilitation the following positive changes were revealed: a significant increase in patient tolerance to physical exercise (as measured by a six-minute walk), a decrease in the number of patients with clinical and subclinical depression (on the scale of HADS), additional antihypertensive effect, normalization of lipid profile, as well as an improved quality of life (according to SAQ questionnaire, SF-36). *Conclusion:* The work of a multidisciplinary team has solved many problems, such as coordination of individual specialists, joint development of a common plan, shorter stationary treatment period. The system is particularly effective in patients with polymorbidity, mutually aggravating disorders of vital activity, often leading to social exclusion of patients. In the future it seems necessary to develop a unified training program for multidisciplinary teams of specialists of primary vascular departments, as well as to develop uniform criteria for assessing the effectiveness of rehabilitation activities.

#### PP42

### VASCULAR PERFUSION, BODY COMPOSITION AND MUSCLE STRENGTH IN CHRONIC KIDNEY DISEASE PATIENTS ON REGULAR HEMODIALYSIS PROGRAM

*Bruna Bernardino, MSc<sup>1</sup>, André Novo, PhD<sup>2</sup>, Paulo Azevedo, BC<sup>3</sup>, Eugénia Mendes, MSc<sup>2</sup>, Leonel Preto, PhD<sup>2</sup>*

<sup>1</sup>Health Centre, Mogadouro, <sup>2</sup>School of Health, Polytechnic Institute of Bragança, Bragança, <sup>3</sup>TECSAM, Mogadouro, Portugal

*Objective:* This study aimed to identify the relationship between vascular perfusion, body composition and muscle strength in chronic kidney disease patients on regular hemodialysis program. *Method:* 27 patients were studied, 20 males and 7 females, with ages between 39 and 94 years old. The diameter and the flow of the draining vein were evaluated by ultrasound flow. A Hand Grip Test, Pinch Gauge Test and an anthropometric evaluation using a bioimpedance scale were done. *Results:* The average flow of the arterio-venous fistula was 1,340.096±304.615 ml/min and the diameter of the arterio-venous fistula was, on average, 0.57±0.06 mm. To check for significant differences between the variables the Spearman correlation coefficient test we used. There were statistically significant negative correlations between left handgrip strength and average flow ( $r=-0.576, p=0.01$ ), pinch gauge test of the opposite side of the fistula and average flow ( $r=-0.450, p=0.059$ ) and visceral fat and average flow ( $r=-0.444, p=0.05$ ). Individuals with higher results in the pinch gauge test of the left finger showed lower flow, lower diameter and lower area of the draining vein. *Conclusions:* The results suggest that there may be a negative relationship between the flow of the arteriovenous fistula and muscle strength and body composition. Higher values of muscle strength correspond to lower flow values of the draining vein.

## F. REHABILITATION AND NUTRITION

#### PP43

### LIFE QUALITY CHANGES OF SENIORS AFTER DENTAL PROSTHETICS

*Ilze Vāciete<sup>1</sup>, Kristīne Krastiņa<sup>1</sup>, Aivars Vētra, MD, PhD<sup>2</sup>*

<sup>1</sup>The society of "Latvian association of Samaritans", <sup>2</sup>Rīga Stradiņš University, Latvia

*Introduction:* In today's changing world, one of the biggest political challenges is the aging of the population. In Latvia, each fourth

inhabitant is at retirement age and the research about the seniors' living standards and the problems are not widespread, though these questions are important. *Aim:* To evaluate the quality of life of social care centre clients, who need dental plate. *Materials and Methods:* Statistical data of 2015 and a summary of questionnaire results of social care home clients. *Results:* Tooth loss affects mainly three important components of life quality: outer appearance, chewing function, which also includes swallowing function and communication. A human is characterized through the abstract verbal thinking level, but the problem is that speech is getting unclear. Clear, understandable language learning has a crucial influence on all mental activities, because the language is the first necessity, and it is one of the most important social realities in communication. The changes in the human appearance, facial mimic, poor chewing functions may limit food choice and may contribute to dysphagia. In Latvia removable dental plates are very popular, especially at the social care homes. After prosthetics, clients adapt their articulation apparatus for precise functioning or traditional clear sound pronunciation. The clients' life quality is getting worse, because the sound, which the client pronounces is only close to the traditional sound pronunciation, but, although, what a person says is clear, there is no ideal audio experience. Summarizing the statistics about the year 2015, in four social care centers 424 clients were questioned: 20% clients had total dental plates, 7% had partial dental plates. 19% of clients were using them, 1.6% were not using them, 3% were using them occasionally. *Conclusions:* The results show that speech forming parameters after dental prosthetics are not having a significant effect, because the clients have problems with eating, dental plates are pressing and are falling out from the mouth. Those clients who refuse wearing the plates develop swallowing problems. Social care centre clients do not have any information about the problem solutions, and they choose not to use dental plates or use them only occasionally.

#### PP44

### DYSPHAGIA AS INITIAL COMPLAINT OF DIFFUSE IDIOPATHIC SKELETAL HYPEROSTOSIS (DISH) – A CASE STUDY

*Pedro Aroso, MedDr, Vítor Simões, MedDr, António Araújo, MedDr, Joana Costa, MedDr, Carla Amaral, MedDr*

*Physical Medicine and Rehabilitation resident in Coimbra Hospital and University Centre, Portugal*

*Introduction:* Diffuse idiopathic skeletal hyperostosis (DISH), also known as Forestier's disease, is a common disease, more prevalent in male population over 40 years old, characterized by entheses calcification and ossification. The most affected structure is the anterior longitudinal ligament. Dysphagia is the most common extra-skeletal clinical manifestation. Symptoms can arise from cervical osteophytes mechanical compression or from surrounding soft tissues secondary inflammation. *Case report:* The authors describe a case of a 50-year-old male presented to the Physical Medicine and Rehabilitation outpatient clinic, for sporadic episodes of dysphagia and laryngeal spasm during the past 3 years, with no identifiable etiology. He denied symptoms of radiculopathy. The physical examination showed oropharynx hyperemia, soft palate congestion, hyperactive pharyngeal reflex and limited cervical range of movement. The remaining neurological/ENT physical examination were unremarkable. The imaging study performed revealed abnormalities suggestive of DISH. He underwent several speech therapy sessions for swallowing rehabilitation with slight symptoms improvement, confirmed on video-fluoroscopy control. Referred to Neurosurgery that suggested surveillance Work-up: The patient performed exhaustive laboratory and imaging studies: videofluoroscopy which revealed the valleculae and piriform sinuses contrast accumulation associated with laryngeal penetration episodes; neck MRI which showed peri-laryngeal soft tissue swelling; thyroid ultrasound,