

The International 22nd Puijo Symposium
"PHYSICAL EXERCISE IN CLINICAL MEDICINE –
CRITICAL APPRAISAL OF SCIENTIFIC EVIDENCE"
June 24 - 28, 2014 Kuopio, Finland

**PHYSIOTHERAPIST- LED GROUP BASED EXERCISE PROGRAM IMPROVED
PHYSICAL FITNESS IN PATIENTS WITH CHRONIC HEART FAILURE AND
COMORBIDITIES. A RANDOMIZED CONTROLLED TRIAL**

Maria Borland¹⁻³, Agneta Rosenkvist¹, Åsa Cider^{3,4}.

¹NärRehab Physiotherapy Unit, Primary Health Care, ²Research and Development Council Region Södra Älvsborg, Region Västra Götaland, ³Institute of Neuroscience and Physiology/Physiotherapy, Sahlgrenska Academy, University of Gothenburg, ⁴Dept. of Physiotherapy and Occupational therapy, Sahlgrenska University Hospital, Gothenburg, Sweden.

Corresponding author mail address: maria.borland@vgregion.se

Objective.

To investigate the impact of physiotherapist-led group based exercise program on physical fitness and health related quality of life (HR-QoL) in patients with chronic heart failure and comorbidities.

Methods.

Forty-eight patients (10 women), age 71 ± 8 years, ejection fraction 27±10%, and NYHA II-III, performed a bicycle test, 6 minute walk test (6MWT) and muscle endurance tests. HR-QoL was evaluated with short form (SF-36). After the assessments the patients were randomized to either intervention or control group. The intervention consisted of an individually designed group-based exercise program for 60 minutes, twice a week, during 3 months. The control group was asked to live their usual life during the study period.

Result.

A total of 42 patients completed the study, 6 dropped-out. Physical fitness significantly improved i.e exercise tolerance (p= 0.001), 6MWT (p=0.014), shoulder abduction (p=0.028) heel lift (p=<0.0001) and HR-QoL (p=0.018) in the intervention group compared to the control group.

Conclusion.

Physiotherapist-led group based exercise should be used to improve physical fitness and HR-QoL in patients with CHF that also have comorbidities.