Activities of daily life (ADLs) before and after rehabilitation in patients with COPD and CHF

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To study the effects of pulmonary rehabilitation on daily physical activity in patients with COPD and CHF.It seems reasonable to hypothesize that an improved sub-maximal performance capacity following pulmonary rehabilitation and the correct use of...

Ethical review	Approved WMO
Status	Will not start
Health condition type	Heart failures
Study type	Observational non invasive

Summary

ID

NL-OMON35967

Source
ToetsingOnline

Brief title
ADLs before and after rehabilitation in patients with COPD and CHF

Condition

- Heart failures
- Bronchial disorders (excl neoplasms)

Synonym
Chronic Heart Failure, Chronic Obstructive Pulmonary Disease

Research involving
Human

Sponsors and support

Primary sponsor: Ciro+
Source(s) of monetary or material Support: Ministerie van OC&W

Intervention

Keyword: activities of daily living, CHF, COPD, rehabilitation

Outcome measures

Primary outcome

The difference in ventilation and oxygen uptake during the performance of ADL

before and after rehabilitation.

Secondary outcome

-Difference in physical activity

-Difference in heart rate

-Difference in time to accomplish the ADLs

-Difference in Borg symptom scores after the performance of ADLs

-Differences in COPM (patients scores on performance and satisfaction)

Study description

Background summary

The degree and impact of dyspnea during ADLs in patients with COPD and CHF is worse compared to healthy elderly subjects. Various non-pharmacological interventions, like exercise training and energy conservation techniques, can be considered to reduce the task-related dyspnea sensation and, in turn, improve the performance of ADLs in COPD and CHF. However, its effects have never been studied.
Therefore, there is a clear rationale to study the effects on the performance of domestic ADLs in patients with COPD and CHF after a program of high-intensity interval training in combination with occupational therapy.

Study objective

To study the effects of pulmonary rehabilitation on daily physical activity in patients with COPD and CHF.
It seems reasonable to hypothesize that an improved sub-maximal performance capacity following pulmonary rehabilitation and the correct use of ECTs will

result in a lower task-related metabolic load and reduce the burden of ADLs in patients with COPD and CHF.

Study design

Longitudinal observational design.

Intervention

regular rehabilitation

Study burden and risks

All intervention take place at Ciro+ in Horn as part of regular pulmonary rehabilitation. In addition, patients will perform 3 ADL-tests. The risks of participation in the study are almost zero.

Contacts

Public
Ciro+

Hornerheide 1
6085 NM Horn
NL
Scientific
Ciro+

Hornerheide 1
6085 NM Horn
NL

Trial sites

Listed location countries

Netherlands

Eligibility criteria

Age
Adults (18-64 years)
Elderly (65 years and older)

Inclusion criteria

- Patients with COPD as a primary diagnosis according to the Global Initiative For Chronic Obstructive Pulmonary Lung Disease (GOLD) definition: *Chronic obstructive pulmonary disease (COPD) is a preventable and treatable disease with some significant extrapulmonary effects that may contribute to the severity in individual patients. Its pulmonary component is characterized by airflow limitation that is not fully reversible.The airflow limitation is usually progressive and associated with an abnormal inflammatory response of the lung to noxious particles or gases*. COPD is diagnosed by a chest physician. Patients with mild (GOLDI; FEV1/FVC<70% and FEV1>=80% of predicted value) to very severe (GOLDIV; FEV1/FVC<70% and FEV1<30% of predicted value) COPD will be included in the study.
OR
- Patients with CHF as a primary diagnosis according to the American College of Cardiology and American Heart Association definition: *Heart failure is a complex clinical syndrome that can resultfrom any structural or functional cardiac disorder that impairs the ability of the ventricle to fill with or eject blood*. CHF is diagnosed by a cardiologist. Patients with mild (NYHA class I) to severe (NYHA class IV) will be included in the study.
- Clinically stable on the basis of clinical picture by chest physician or cardiologist.
- Treated according to the current international guidelines.
- Permission for voluntary participation. Patients will be asked after baseline assessment and have to sign an informed consent.

Exclusion criteria

-Neuromuscular co-morbidities. Patients with neuromuscular co-morbidities can experience problems, not caused by COPD or CHF, during the performance of the activities of daily life.
-Lack of motivation for voluntary participation in this study.
-Patients with long-term oxygen therapy use will be excluded for measurements of metabolic load.

Study design

Design

Study type: Observational non invasive
Masking: Open (masking not used)

Control:	Uncontrolled
Primary purpose:	Treatment

Recruitment

NL

Recruitment status:	Will not start
Enrollment:	80
Type:	Anticipated

Ethics review

Approved WMO

Date:	19-12-2011
Application type:	First submission
Review commission:	MEC academisch ziekenhuis Maastricht/Universiteit Maastricht, MEC azM/UM (Maastricht)

Study registrations

Followed up by the following (possibly more current) registration

No registrations found.

Other (possibly less up-to-date) registrations in this register

No registrations found.

In other registers

Register	ID
CCMO	NL36564.068.11