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Supervised high intensity continuous and interval training vs self-paced training in Chronic Obstructive Pulmonary Disease (COPD)

Submission date
23/02/2007

Recruitment status
No longer recruiting

Registration date
29/03/2007

Overall study status
Completed

Last Edited
22/09/2021

Condition category
Respiratory

[_] Prospectively registered
[_] Protocol
[_] Statistical analysis plan
[X] Results
[_] Individual participant data

Plain English summary of protocol
Not provided at time of registration

Contact information

Type(s)
Scientific

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Additional identifiers

Protocol serial number
Interval training 01

Study information

Scientific Title
Supervised high intensity continuous and interval training vs self-paced training in Chronic Obstructive Pulmonary Disease (COPD)

Acronym

INTCONT

Study objectives
To determine differences in responses to supervised high intensity training utilizing either continuous or interval training profiles compared to a self-paced exercise program.

Ethics approval required
Old ethics approval format

Ethics approval(s)
The Regional Ethical Committee on Biomedical Research Involving Human Subjects at Szeged University, Faculty of Medicine and Pharmaceutics approved the study on 18 December 2006 with a reference number 134/2006.

Primary study design
Interventional

Study design
Randomized trial

Study type(s)
Not Specified

Health condition(s) or problem(s) studied
Moderate to severe COPD patients

Interventions
Three study groups will be studied:

A. Supervised, high intensity continuous training
B. Supervised, interval training
C. Home-based self paced training program

The assignment of patients to group C will be based on the accessibility of the research center to the patients. We have to use this approach because the travel distance in the area would be unreasonable. The assignment of the subjects to the other two groups (A and B) is randomized.

High intensity constant work rate (CWR) training protocol involved exercising on a cycle ergometer at a work rate equivalent to 80% peak work rate achieved on a pre-training incremental exercise test. The CWR was continued for 45 minutes per session, three sessions per week for 8-week training period.

Interval training: involved a 30 min period of cycling for 2 minutes at 90% peak work rate followed by 1 minute at 50% peak work rate. This 30 min period was preceded and followed by approximately 7.5 minutes of exercise at 50% peak work rate (warm-up and cool-down phase).

Home training involved cycling, stair climbing and walking in their natural environment with the same weekly periodicity and time interval as used in the in-center programs. The home training period also lasted for 8 weeks.

Intervention Type

Other

Phase
Not Specified

Primary outcome(s)
Change in peak oxygen uptake in the incremental test.

Key secondary outcome(s)
1. After training changes in peak work rate
2. Quality of life
3. Lactate threshold
4. Changes in isotime physiologic variables (minute ventilation, ventilatory equivalents, respiratory rate and heart rate)

Completion date
02/01/2008

Eligibility

Key inclusion criteria
1. COPD patients
2. Forced Expiratory Volume in the first second (FEV1)<80% and FEV1/ Forced Vital Capacity (FVC)<70%

Participant type(s)
Patient

Healthy volunteers allowed
No

Age group
Not Specified

Sex
Not Specified

Total final enrolment
71

Key exclusion criteria
Severe cardiovascular, neurological or exercise-limiting muskuloskeletal diseases

Date of first enrolment
07/01/2002

Date of final enrolment
02/01/2008

Locations

Countries of recruitment
Hungary

Study participating centre
Alkotmany u 36
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Hungary
6772

Sponsor information

Organisation
Department of Pulmonology, Szeged University, Faculty of Medicine and Pharmaceutics (Hungary)

ROR
https://ror.org/01pnej532

Funder(s)

Funder type
University/education

Funder Name
Department of Pulmonology, Szeged University, Faculty of Medicine and Pharmeceutics (Hungary)

Results and Publications

Individual participant data (IPD) sharing plan

IPD sharing plan summary
Not provided at time of registration

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article		01/11/2007	22/09/2021	Yes	No