

The effect of inspiratory muscle training intensities on pulmonary function and exercise capacity in healthy subjects

Submission date 11/05/2009	Recruitment status No longer recruiting	<input type="checkbox"/> Prospectively registered <input type="checkbox"/> Protocol
Registration date 15/07/2009	Overall study status Completed	<input type="checkbox"/> Statistical analysis plan <input checked="" type="checkbox"/> Results
Last Edited 15/08/2011	Condition category Other	<input type="checkbox"/> 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

EudraCT/CTIS number

IRAS number

ClinicalTrials.gov number

Secondary identifying numbers

Study information

Scientific Title

The effect of inspiratory muscle training intensities on pulmonary function and exercise capacity in healthy subjects: a randomised controlled trial

Study objectives

Inspiratory muscle training performed at 80%, 60% and 40% of maximal intensity will result in changes in inspirator muscle function with 80% and 40% producing positive effects on exercise capacity and 80% producing positive effect on lung volumes.

Ethics approval required

Old ethics approval format

Ethics approval(s)

School of Health Care Studies R&D Committee approved on the 27th August 2007 (ref: REG2707)

Study design

Randomised controlled trial

Primary study design

Interventional

Secondary study design

Randomised controlled trial

Study setting(s)

Other

Study type(s)

Diagnostic

Participant information sheet

Not available in web format, please use the contact details below to request a patient information sheet

Health condition(s) or problem(s) studied

Pulmonary function, exercise capacity

Interventions

Intervention: inspiratory muscle training at 80%, 60%, 40% of maximum sustained inspiratory pressure. The training intervention was performed 3 times a week over an eight week period. Each training session took 30 minutes to complete.

Control: no participation in any form of training throughout the duration of the study.

The control group and the three training groups were assessed at the beginning of the trial (the initial screening visit) and all measurements (excluding body composition) were repeated at the trial conclusion (at the end of an eight week training period for the three training groups and the control group).

Intervention Type

Other

Phase

Not Applicable

Primary outcome measure

1. Lung volumes (vital capacity and total lung capacity)
2. Exercise capacity (cycle ergometry)
3. Inspiratory pressure

Measurements were taken before the training intervention and then at the cessation of training (i.e., following the 8 weeks of training).

Secondary outcome measures

No secondary outcome measures

Overall study start date

04/02/2008

Completion date

09/05/2008

Eligibility**Key inclusion criteria**

Healthy, moderately trained subjects (aged 18 - 27 years, either sex). The rationale for the age range was so data could be compared to those obtained in a population of adults with cystic fibrosis.

Participant type(s)

Patient

Age group

Adult

Lower age limit

18 Years

Sex

Both

Target number of participants

40

Key exclusion criteria

Pre-existing respiratory disease

Date of first enrolment

04/02/2008

Date of final enrolment

09/05/2008

Locations**Countries of recruitment**

United Kingdom

Wales

Study participating centre

Department of Physiotherapy

Cardiff

United Kingdom

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Sponsor information**Organisation**

Cardiff University (UK)

Sponsor details

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Sponsor type

University/education

Website

<http://www.cardiff.ac.uk>

ROR

<https://ror.org/03kk7td41>

Funder(s)

Funder type

Charity

Funder Name

Physiotherapy Research Foundation (UK) - Chartered Society of Physiotherapy (ref: PRF/97/5)

Results and Publications

Publication and dissemination plan

Not provided at time of registration

Intention to publish date

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	results	01/06/2011		Yes	No