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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	[_] Prospectively registered [_] Protocol [_] Statistical analysis plan [X] Results [_] Individual participant data
Registration date 15/07/2009	**Overall study status** Completed	
Last Edited 15/08/2011	**Condition category** Other	

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
0622839

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

Study type(s)
Diagnostic

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 begining 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(s)
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).

Key secondary outcome(s))
No secondary outcome measures

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

Healthy volunteers allowed
No

Age group
Adult

Lower age limit
18 years

Sex
All

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

Deapartment of Physiotherapy
Cardiff
United Kingdom
CF14 4XN

Sponsor information

Organisation
Cardiff University (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

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