

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

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		<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

Contact name
Dr Stephanie Enright

Contact details
Department of Physiotherapy
School of health Care Studies
Cardiff University
Cardiff
United Kingdom
CF14 4XN
+44 (0)29 2068 7558
enrights@cardiff.ac.uk

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)

Primary study design

Interventional

Study design

Randomised controlled trial

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 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(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

Department 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