# A comparison of upper-limb and lower-limb exercise training in patients with intermittent claudication (IC)

Submission date	Recruitment status No longer recruiting	<ul><li>Prospectively registered</li></ul>		
24/08/2005		☐ Protocol		
Registration date	Overall study status	Statistical analysis plan		
25/10/2005	Completed	[X] Results		
<b>Last Edited</b> 28/07/2010	Condition category Circulatory System	[] Individual participant data		

## Plain English summary of protocol

Not provided at time of registration

# Contact information

#### Type(s)

Scientific

#### Contact name

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#### Contact details

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# Additional identifiers

**Protocol serial number** PG/2000042

# Study information

Scientific Title

#### **Study objectives**

Upper-limb aerobic exercise training will be as effective as lower-limb aerobic exercise training for evoking symptomatic improvements in patients with symptomatic peripheral arterial disease (PAD).

#### Ethics approval required

Old ethics approval format

#### Ethics approval(s)

Not provided at time of registration

#### Study design

Randomised controlled trial

#### Primary study design

Interventional

#### Study type(s)

Treatment

#### Health condition(s) or problem(s) studied

Peripheral arterial disease.

#### **Interventions**

Upper- versus lower-limb aerobic exercise training. Supervised training sessions were held twice weekly for 6 weeks with arm cranking or leg cranking.

#### Intervention Type

Other

#### Phase

Not Applicable

#### Primary outcome(s)

Walking performance (claudication distance and maximum walking distance).

## Key secondary outcome(s))

- 1. Upper- and lower-limb aerobic exercise capacity
- 2. Disease-specific and generic quality of life measures
- 3. Blood markers of cardiovascular disease risk

## Completion date

31/12/2005

# **Eligibility**

# Key inclusion criteria

Patients with stable intermittent claudication were recruited from the Sheffield Vascular Institute at the Northern General Hospital, Sheffield, UK. The clinical diagnosis of PAD was established using the patients history and a physical examination, and was confirmed by the Doppler assessment of ankle-brachial pressure index (ABPI), a non-invasive reliable measure of lower-extremity hemodynamics, in accordance with current UK medical practice.

#### Participant type(s)

Patient

#### Healthy volunteers allowed

No

#### Age group

Adult

#### Sex

All

#### Key exclusion criteria

Patients experiencing symptoms of IC for less than 12 months, or reporting a significant change in walking ability within this time period were considered to have unstable disease and were, as a consequence, excluded. Patients were also excluded if they exhibited features of critical ischemia, had undergone a re-vascularization procedure within the previous 12 months, or if initial assessment established that they suffered from severe arthritis (i.e. if they were unable to walk unaided or perform either upper- or lower limb cranking exercise due to joint pain), severe lumbar spine disease or unstable cardiorespiratory conditions (i.e. unstable blood pressure, recent electrocardiographic changes or acute myocardial infarction, unstable angina, third-degree heart block, acute congestive heart failure and severe respiratory conditions).

# Date of first enrolment

01/10/2000

#### Date of final enrolment

31/12/2005

## Locations

#### Countries of recruitment

United Kingdom

England

Study participating centre
Centre for Sport and Exercise Science
Sheffield
United Kingdom
S10 2BP

# Sponsor information

#### Organisation

Sheffield Hallam University (UK)

#### **ROR**

https://ror.org/019wt1929

# Funder(s)

#### Funder type

Charity

#### **Funder Name**

British Heart Foundation (UK) - (Grant number: PG/2000042)

#### Alternative Name(s)

the\_bhf, The British Heart Foundation, BHF

#### **Funding Body Type**

Private sector organisation

#### **Funding Body Subtype**

Trusts, charities, foundations (both public and private)

#### Location

**United Kingdom** 

# **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	01/12/2005		Yes	No
Results article	results	01/02/2006		Yes	No

Results article results 01/05/2008 Yes

No