

Aerobic exercise training in addition to conventional physiotherapy for chronic low back pain

Submission date	Recruitment status	<input type="checkbox"/> Prospectively registered
27/04/2010	No longer recruiting	<input type="checkbox"/> Protocol
Registration date	Overall study status	<input type="checkbox"/> Statistical analysis plan
30/04/2010	Completed	<input type="checkbox"/> Results
Last Edited	Condition category	<input type="checkbox"/> Individual participant data
30/04/2010	Musculoskeletal Diseases	<input type="checkbox"/> Record updated in last year

Plain English summary of protocol

Not provided at time of registration

Contact information

Type(s)

Scientific

Contact name

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Additional identifiers

Protocol serial number

N/A

Study information

Scientific Title

Aerobic exercise training in addition to conventional physiotherapy for chronic low back pain: a randomised controlled trial

Study objectives

The hypothesis of the study was to determine if the addition of aerobic exercise to conventional physiotherapy treatment for patients with chronic LBP had an additive effect on reducing pain and disability.

Ethics approval required

Old ethics approval format

Ethics approval(s)

1. Hong Kong Polytechnic University Human Subjects Ethics Sub-committee approved on the 20th of December 2005 (ref: HSEARS20051220001)
2. Institutional Review Board of the University of Hong Kong/Hospital Authority Hong Kong West Cluster approved on the 17th of January 2006 (ref: UW 06-013 T/1038)

Study design

Single centre interventional randomised controlled trial

Group assignments: computer-generated random number table; blocks of 4

Primary study design

Interventional

Study type(s)

Treatment

Health condition(s) or problem(s) studied

Chronic low back pain

Interventions

Participants in the intervention and control group received 8 weeks of intervention. All participants were supervised by a physiotherapist for each treatment session. Participants in the intervention group received conventional physiotherapy program and a progressive aerobic training program. The control group only received conventional physiotherapy treatment. Evaluations were performed at the 8-week intervention and at 12 months follow up.

Intervention Type

Other

Phase

Not Applicable

Primary outcome(s)

1. Pain as measured with a 100mm visual analogue scale (VAS), evaluated at baseline and at 8 weeks
2. Functional disability using Aberdeen Low Back Pain Disability Scale (ALBPS). The disability scale ranged between 0 and 72, with higher scores representing greater back pain severity. The scores were converted to a scale of 0 to 100 for comparison. These were evaluated at baseline, 8 weeks and 12 months.

Key secondary outcome(s)

Physical fitness parameters measured at baseline and at 8 weeks. The parameters evaluated were aerobic capacity, muscular endurance, flexibility and body fat composition.

Completion date

31/12/2007

Eligibility

Key inclusion criteria

1. Participants who had low back pain (LBP) symptoms for at least 12 weeks
2. Medically fit for physical fitness testing
3. Either sex, age 18-60

Participant type(s)

Patient

Healthy volunteers allowed

No

Age group

Adult

Lower age limit

18 years

Upper age limit

60 years

Sex

All

Key exclusion criteria

1. Cardiorespiratory conditions that affected the ability to participate in an aerobic exercise training program
2. Evidence of possible systemic disease
3. Inflammatory disease or malignancy
4. Treated on workers compensation claims.
5. Have had physiotherapy treatment for back pain in the three months before recruitment

Date of first enrolment

01/03/2006

Date of final enrolment

31/12/2007

Locations

Countries of recruitment

Hong Kong

Study participating centre
Department of Rehabilitation Sciences
Kowloon
Hong Kong

Sponsor information

Organisation

Hong Kong Polytechnic University (Hong Kong)

ROR

<https://ror.org/0030zas98>

Funder(s)

Funder type

University/education

Funder Name

Hong Kong Polytechnic University (Hong Kong) - Administrative costs

Funder Name

David Trench Rehabilitation Centre (Hong Kong) - Equipment costs

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?
Participant information sheet	Participant information sheet	11/11/2025	11/11/2025	No	Yes

