Clinical Trial Protocol
Iranian Registry of Clinical Trials

22 Nov 2026

The effect of Respiratory muscles resistance training and Specific respiratory muscle training on physical and pulmonary function in patient with asthma.

Protocol summary

Summary

Objectives: We aimed to assess the effect of exercise training program on respiratory muscle strength and exercise on pulmonary function and respiratory muscles, especially the health of asthmatic patients. Study design: Quasi-experimental pretest - posttest study with experimental and control groups. Study population: the population of the study, all women will be diagnosed with asthma during the years 2006-2013 who have admission due to coronary artery diseases. Inclusion criteria: age between 30- 55 years old; history of asthma over two years and exclusion criteria: musculoskeletal problems; disability; pregnancy; cardiovascular disease or serious diseases that interfere with their exercise. Sample size: 23 women with asthma. Methods: samples by randomly were placed in one of three groups; 1- Respiratory muscles resistance exercise training(doing weight training movement including lift, fly, bench press, lat pull down, crunch, rowing), 2- Specific respiratory muscle training(inhale against the resistance by using a especial device) and 3- control group. The trainings were performed for 8 weeks.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT2015011420666N1**
Registration date: **2015-03-15, 1393/12/24**
Registration timing: **retrospective**

Last update:
Update count: **0**

Registration date

2015-03-15, 1393/12/24

Registrant information

Name
Nafiseh Ghodrati
Name of organization / entity
Hakim Sabzevari Univresity
Country
Iran (Islamic Republic of)
Phone
+98 51 4466 9508
Email address
sa.hosseini@hsu.ac.ir

Recruitment status

Recruitment complete

Funding source
Hakim Sabzevari University

Expected recruitment start date

2014-04-18, 1393/01/29

Expected recruitment end date

2014-04-20, 1393/01/31

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

The effect of Respiratory muscles resistance training and Specific respiratory muscle training on physical and pulmonary function in patient with asthma.

Public title

The effect of resistance and specific training in patient with asthma

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria were: age between 55-30 years old, History of asthma over two years. Exclusion criteria:

musculoskeletal problems; disability; pregnancy; cardiovascular disease or acute diseases that interfere with the exercise.

Age
From **30 years** old to **55 years** old

Gender
Female

Phase
N/A

Groups that have been masked
No information

Sample size
Target sample size: **23**

Randomization (investigator's opinion)
Randomized

Randomization description

Blinding (investigator's opinion)
Not blinded

Blinding description

Placebo
Not used

Assignment
Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee
Sabzevar University of Medical Sciences

Street address
Sabzevar University of Medical Sciences, Asad Abadi street

City
Sabzevar

Postal code

Approval date
2014-01-27, 1392/11/07

Ethics committee reference number
madsab.rec.93.102

Health conditions studied

1

Description of health condition studied
asthma

ICD-10 code
j45

ICD-10 code description
Asthma

Primary outcomes

1

Description
respiratory function

Timepoint
8 weeks before and after the intervention.

Method of measurement
spirometry

2

Description
physical function

Timepoint
8 weeks before and after the intervention.

Method of measurement
strength and endorance muscle

Secondary outcomes

empty

Intervention groups

1

Description
The control group did not cause any interference

Category
Rehabilitation

2

Description
Specific respiratory muscle training (inhale against the resistance by using a especial device) . This training can be done up to 50% of maximum strength of respiratory muscles

Category
Rehabilitation

3

Description
Respiratory muscles resistance training (doing weight training movement including lift, fly, bench press, lat pull down, crunch, rowing) that performed inThe three sets of 8-12 repetitions

Category
Rehabilitation

Recruitment centers

1

Recruitment center

Name of recruitment center
Sabzevar Vasei hospital

Full name of responsible person
Mohammad Mohammadzadeh

Street address
In front of The Health Park, Shohadaye Hasteie blvd.

City

Sabzevar

Sponsors / Funding sources

1

Sponsor
Name of organization / entity
Sabzevar University of Medical Sciences
Full name of responsible person
Ali Asghar Molavi
Street address
Sabzevar University of Medical Sciences, Tohid Shahr
City
Sabzevar
Grant name
Grant code / Reference number
Is the source of funding the same sponsor organization/entity?
Yes
Title of funding source
Sabzevar University of Medical Sciences
Proportion provided by this source
100
Public or private sector
empty
Domestic or foreign origin
empty
Category of foreign source of funding
empty
Country of origin
Type of organization providing the funding
empty

Person responsible for general inquiries

Contact
Name of organization / entity
Hakim Sabzevari University
Full name of responsible person
seyad alireza hosseini kakhk
Position
Associate Professor,Faculty of Physical Education and Sports Science
Other areas of specialty/work
Street address
Facully of Physical Education and Sports Sciences, Hakim Sabzevari University
City
Sabzevar
Postal code
Phone
+98 21 4444 4353
Fax
Email
hosseini18@yahoo.com
Web page address

Person responsible for scientific inquiries

Contact
Name of organization / entity
Hakim Sabzevari University
Full name of responsible person
Seyed Alireza Hosseini Kakhak
Position
Associate Professor, facully of Physical Education and Sports Science
Other areas of specialty/work
Street address
Facully of Physical Education and Sports Sciences, Hakim Sabzevari University
City
Sabzevar
Postal code
Phone
+98 21 4444 4353
Fax
Email
hosseini18@yahoo.com
Web page address

Person responsible for updating data

Contact
Name of organization / entity
Faculty of Physical Education, Hakim Sabzevari University
Full name of responsible person
Nafiseh Ghodrati
Position
Graduate student
Other areas of specialty/work
Street address
Sabzevar University of Medical Sciences
City
Sabzevar
Postal code
Phone
+98 51 4466 9508
Fax
Email
nafise.ghodrati@yahoo.com
Web page address

Sharing plan

Deidentified Individual Participant Data Set (IPD)
empty
Study Protocol
empty
Statistical Analysis Plan
empty
Informed Consent Form
empty
Clinical Study Report
empty
Analytic Code
empty
Data Dictionary

empty