

Clinical Trial Protocol

Iranian Registry of Clinical Trials

26 Jun 2026

The effect of a course of combined respiratory and corrective exercises on pulmonary function and chest Anthropometric index in children with asthma

Protocol summary

Study aim

Asthma is a chronic disease that causes morbidity and reduced quality of life. People with asthma are less active than their peers, leads the patient to become more and more sedentary. Asthma can cause postural changes in the spine, shoulder girdle, which is a good option to prevent and correct these changes. For the prevention and correction of these changes, the use of corrective exercises and breathing can be a good choice. Therefore, the aim of this study was to investigate The effect of combined respiratory and corrective training on angle of kyphosis and respiratory capacity indices in children with asthma.

Design

Clinical trial with control group

Settings and conduct

Children with asthma referred to Hafdeh Shahrivar Hospital in Rasht were identified by a pulmonologist with mild asthma according to the inclusion and exclusion criteria. Samples were randomly divided into two groups of 15 experimental subjects (combined corrective and respiratory exercises and conventional therapy) and the control group (conventional therapy). The experimental group performed selected corrective and respiratory exercises for eight weeks, three sessions per week and 30 to 45 minutes per session

Participants/Inclusion and exclusion criteria

Inclusion criteria: age between 8 to 14 years, mild asthma and the desire of the subject and parents to participate in the study Exit condition: Older and younger ages, severe or moderate asthma, severe asthma attacks and scoliosis and orthopedic problems, unwillingness of the child or parents to participate in the study

Intervention groups

Experimental group: The training protocol receives corrective and respiratory movements Control group:

They will not have any regular and regular exercise and only the usual treatment

Main outcome variables

Evaluation of dorsal spinal curvature (kyphosis):respiratory capacity (FEV1, FEV1 / FVC): anthropometric indices chest

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20160815029373N6**

Registration date: **2020-12-19, 1399/09/29**

Registration timing: **prospective**

Last update: **2020-12-19, 1399/09/29**

Update count: **0**

Registration date

2020-12-19, 1399/09/29

Registrant information

Name

Parisa Sedaghati

Name of organization / entity

Guilan University

Country

Iran (Islamic Republic of)

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sedaghati@guilan.ac.ir

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2020-12-21, 1399/10/01

Expected recruitment end date

2021-03-15, 1399/12/25

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

The effect of a course of combined respiratory and corrective exercises on pulmonary function and chest Anthropometrie index in children with asthma

Public title

The effect of breathing exercises on pulmonary function

Purpose

Supportive

Inclusion/Exclusion criteria**Inclusion criteria:**

Age between 8 and 14 yearst Mild asthma Desiring of the subject and parents to participate in the study

Exclusion criteria:

Older and younger ages Severe or moderate asthma Severe asthma attacks Scoliosis orthopedic problems

Age

From **8 years** old to **14 years** old

Gender

Both

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: **30**

Randomization (investigator's opinion)

Not 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**

Ethics committee of Guilan University of Medical Sciences

Street address

8 km of Qazvin-Rasht road, Faculty of Physical Education and Sports Sciences, University of Guilan

City

Rasht

Province

Guilan

Postal code

4199843653

Approval date

2020-02-21, 1398/12/02

Ethics committee reference number

IR.GUMS.REC.1393.537

Health conditions studied**1****Description of health condition studied**

Asthmatic patients

ICD-10 code

J45

ICD-10 code description

Asthma

Primary outcomes**1****Description**

Angle of kyphosis

Timepoint

The beginning of the study and eight weeks later

Method of measurement

Flexible ruler

2**Description**

Respiratory capacity

Timepoint

The beginning of the study and eight weeks later

Method of measurement

Spirometry

Secondary outcomes

empty

Intervention groups**1****Description**

Intervention group: performing corrective and breathing exercises protocol with common treatment

Category

Rehabilitation

2**Description**

Control group: protocol with common treatment

Category

Other

Recruitment centers

1

Recruitment center

Name of recruitment center

17 Shahrivar Hospital, Rasht

Full name of responsible person

Seyedeh Zahra Mirshafiei

Street address

Shahid Siadati Square, Rasht, Gilan Province

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Sponsors / Funding sources

1

Sponsor

Name of organization / entity

University of Guilan

Full name of responsible person

Farhad Rahmaninia

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Grant name**Grant code / Reference number****Is the source of funding the same sponsor organization/entity?**

Yes

Title of funding source

University of Guilan

Proportion provided by this source

100

Public or private sector

Public

Domestic or foreign origin

Domestic

Category of foreign source of funding

empty

Country of origin**Type of organization providing the funding**

Other

Person responsible for general inquiries

Contact

Name of organization / entity

The University of Guilan

Full name of responsible person

Seyedeh Zahra Mirshafiei

Position

Student

Latest degree

Master

Other areas of specialty/work

Others

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Corrective Exercise

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Sharing plan**Deidentified Individual Participant Data Set (IPD)**

No - There is not a plan to make this available

Justification/reason for indecision/not sharing IPD

اطلاعات بیشتری وجود ندارد

Study Protocol

No - There is not a plan to make this available

Statistical Analysis Plan

Not applicable

Informed Consent Form

No - There is not a plan to make this available

Clinical Study Report

No - There is not a plan to make this available

Analytic Code

No - There is not a plan to make this available

Data Dictionary

No - There is not a plan to make this available