Clinical Trial Protocol
Iranian Registry of Clinical Trials

17 Sep 2026

The effect of a course of combined respiratory and corrective exercises on pulmonary function and chest Anthropometrie 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)
Phone
+98 21 4423 7480
Email address
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

City
Rasht

Province
Guilan

Postal code
5437941446

Phone
+98 13 3336 9391

Email
17shahrivar@gums.ac.ir

Sponsors / Funding sources

1

Sponsor

Name of organization / entity
University of Guilan

Full name of responsible person
Farhad Rahmaninia

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

City
Rasht

Province
Guilan

Postal code
4199843653

Phone
+98 13 3369 0276

Email
university@guilan.ac.ir

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

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

City
Rasht

Province
Guilan

Postal code
4199843653

Phone
+98 13 3369 0274

Email
sedaghati@guilan.ac.ir

Person responsible for scientific 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
Corrective Exercise

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

City
Rasht

Province
Guilan

Postal code
4199843653

Phone
+98 13 3369 0274

Email
sedaghati@guilan.ac.ir

Person responsible for updating data

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
Corrective Exercise
Street address
8 km of Qazvin-Rasht road, Faculty of Physical Education and Sports Sciences, University of Guilan, Rasht
City
Rasht
Province
Guilan
Postal code
4199843653
Phone
+98 13 3369 0274
Email
sedaghati@guilan.ac.ir

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