

Clinical Trial Protocol

Iranian Registry of Clinical Trials

17 Sep 2026

The effect of corrective and respiratory exercises on craniovertebral angle and respiratory function in elderly cases with history of COVID-19

Protocol summary

Study aim

The aim of this study was to investigate the effect of corrective and respiratory exercises on cranio-vertebral angle and respiratory function in the elderly with a history of Covid-19.

Design

A clinical trial with a control group, no blinding, non-random, on 30 patients.

Settings and conduct

Elderly (50 to 70 years old) men and women who live in Rasht and are referred to medical centers with a history of the Covid-19 virus six months ago and have head forward and chest kyphosis are selected and allocated in two groups. The experimental group receives intervention but the control group is not intervene.

Participants/Inclusion and exclusion criteria

Inclusion criteria: More than three months have passed since the definitive diagnosis of COVID-19 and negative PCR test; more than six months have passed since other acute illnesses; no COPD or other acute respiratory illness; do not use aids to walk and perform other daily activities.

Intervention groups

Intervention group: In addition to conventional therapies after Covid-19, receives corrective and breathing exercises. Control group: receives conventional treatments after Covid-19.

Main outcome variables

Cranio-vertebral angle; respiratory capacity

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20160815029373N7**

Registration date: **2021-09-01, 1400/06/10**

Registration timing: **registered_while_recruiting**

Last update: **2021-09-01, 1400/06/10**

Update count: **0**

Registration date

2021-09-01, 1400/06/10

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

2021-08-23, 1400/06/01

Expected recruitment end date

2021-11-22, 1400/09/01

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

The effect of corrective and respiratory exercises on craniovertebral angle and respiratory function in elderly cases with history of COVID-19

Public title

The effect of exercise on the respiratory function of the elderly after COVID-19

Purpose

Supportive

Inclusion/Exclusion criteria

Inclusion criteria:

More than three months have passed since the definitive diagnosis of COVID-19. No COPD or other acute respiratory illness.

Exclusion criteria:

Recurrence of corona disease Not willingness to cooperation in this study

Age

From **50 years** old to **70 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

Other

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Ethics committee of Kashan University of Medical Sciences

Street address

Kashan University of Medical Sciences, Kashan, I.R. Iran

City

Kashan

Province

Isfahan

Postal code

88715973474

Approval date

2021-06-26, 1400/04/05

Ethics committee reference number

IR.KAUMS.REC.1400.021

Health conditions studied

1

Description of health condition studied

Coronavirus

ICD-10 code

B34.2

ICD-10 code description

Coronavirus infection, unspecified

Primary outcomes

1

Description

Respiratory capacity

Timepoint

The beginning of the study and eight weeks later

Method of measurement

Spirometer

2

Description

Cranio vertebral angle

Timepoint

The beginning of the study and eight weeks later

Method of measurement

Goniometer

Secondary outcomes

empty

Intervention groups

1

Description

Intervention group: Correctional and breathing exercises with conventional therapy, breathing exercises used in this study including deep breathing exercises, feathered death exercises, deep death exercises, deep inhaling and exhaling exercises with concentration, diaphragmatic breathing and three-step breathing.

Category

Rehabilitation

2

Description

Control group: Conventional treatments include medications prescribed by a doctor for side effects or other conditions such as a specific sleeping position or intensity of physical activity prescribed by a doctor.

Category

Other

Recruitment centers

1

Recruitment center

Name of recruitment center

Pars clinic for patients with Covid-19

Full name of responsible person

Fakhimi Koorosh

Street address

Rasht, Hajiabad St., Pars Clinic

City

Rasht

Province

Guilan

Postal code

4193833697

Phone

+98 13 3332 9421

Email

it@gums.ac.ir

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

The University of Guilan

Full name of responsible person

Parisa Sedaghati

Street address

5th Kilometer of Persian Gulf Highway, Rasht, Guilan Province, Iran

City

Rasht

Province

Guilan

Postal code

۴۱۹۹۶۱۳۷۷۶

Phone

+98 13 3369 0274

Email

sedaghati@guilan.ac.ir

Grant name

Grant code / Reference number

Is the source of funding the same sponsor organization/entity?

Yes

Title of funding source

The University of Guilan

Proportion provided by this source

50

Public or private sector

Private

Domestic or foreign origin

Domestic

Category of foreign source of funding

empty

Country of origin

Type of organization providing the funding

Persons

Person responsible for general inquiries

Contact

Name of organization / entity

University of Guilan

Full name of responsible person

Parisa Sedaghati

Position

Assistant Professor

Latest degree

Ph.D.

Other areas of specialty/work

Sports pathology and corrective movements

Street address

5th Kilometer of Persian Gulf Highway, Rasht, Guilan Province, Iran

City

Rasht

Province

Guilan

Postal code

4199613776

Phone

+98 13 3369 0274

Email

sedaghati@guilan.ac.ir

Person responsible for scientific inquiries

Contact

Name of organization / entity

University of Guilan

Full name of responsible person

Parisa Sedaghati

Position

Assistant Professor

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Person responsible for updating data

Contact

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Sharing plan

Deidentified Individual Participant Data Set (IPD)

Undecided - It is not yet known if there will be a plan to

make this available

Study Protocol

Undecided - It is not yet known if there will be a plan to make this available

Statistical Analysis Plan

Not applicable

Informed Consent Form

Undecided - It is not yet known if there will be a plan to make this available

Clinical Study Report

Undecided - It is not yet known if there will be a plan to make this available

Analytic Code

Undecided - It is not yet known if there will be a plan to make this available

Data Dictionary

Undecided - It is not yet known if there will be a plan to make this available