

Clinical Trial Protocol

Iranian Registry of Clinical Trials

18 Jun 2026

Comparison of the effect of corrective exercises with and without Cognitive Functional exercises on pain, Kinesiophobia, disability, electromyography and alignment of scapula in people with chronic neck pain Along with scapular downward rotation syndrome

Protocol summary

Study aim

Comparison of the effect of corrective exercises with and without Cognitive Functional exercises on pain, Kinesiophobia, disability, electromyography and alignment of scapula in people with chronic neck pain Along with scapular downward rotation syndrome

Design

The statistical population of the present study was men aged 20 to 45 years with chronic neck pain. Among them, subjects with lower scapular swing syndrome were selected according to the criteria of entering the research and randomly divided into three groups: intervention 1 (corrective exercises) , Intervention (2) (corrective exercises with functional cognitive exercises) and control group will be divided.

Settings and conduct

Kharazmi University of Tehran

Participants/Inclusion and exclusion criteria

- People with neck pain for at least three months - Pain amount, gaining a rating between 3 -7 in the visual grading system of pain - Having a disability score score of between 15 and 30 from a functional disability questionnaire - A neck pain that the doctor has not mentioned for a specific reason - People with lower scapular syndrome

Intervention groups

corrective exercises corrective exercises with Cognitive Functional exercises

Main outcome variables

pain, Kinesiophobia, disability, electromyography and alignment of scapula

General information

Reason for update

Adding measurement variables, Record date of

completion of trial,Change the blindness of the study

Acronym

IRCT registration information

IRCT registration number: **IRCT20180813040787N1**

Registration date: **2019-05-28, 1398/03/07**

Registration timing: **prospective**

Last update: **2020-06-20, 1399/03/31**

Update count: **3**

Registration date

2019-05-28, 1398/03/07

Registrant information

Name

Noorollah Jhavadane

Name of organization / entity

Kharazmi university

Country

Iran (Islamic Republic of)

Phone

+98 21 4471 8356

Email address

njavadaneh68@gmail.com

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2019-05-31, 1398/03/10

Expected recruitment end date

2019-07-11, 1398/04/20

Actual recruitment start date

2019-05-29, 1398/03/08

Actual recruitment end date

2020-02-01, 1398/11/12

Trial completion date

2020-03-02, 1398/12/12

Scientific title

Comparison of the effect of corrective exercises with and without Cognitive Functional exercises on pain, Kinesiophobia, disability, electromyography and alignment of scapula in people with chronic neck pain
Along with scapular downward rotation syndrome

Public title

Comparison of the effect of corrective exercises with and without Cognitive Functional exercises on pain, Kinesiophobia, disability, electromyography and alignment of scapula in people with chronic neck pain

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria:

- People with neck pain for at least three months - Pain amount, gaining a rating between 3 -7 in the visual grading system of pain - Having a disability score score of between 15 and 30 from a functional disability questionnaire - A neck pain that the doctor has not mentioned for a specific reason People with scapular downward rotation syndrome

Exclusion criteria:

- Having any history of fracture and surgery in the shoulder joint - Shoulder instability - The presence of any shoulder injury such as shoulder dislocation, tendonitis and frozen shoulder - The kyphosis angle is greater than 50 and less than 20 degrees - The cranio angle is less than 45 degrees and more than 60 degrees - lack of regular participation in training programs for two consecutive sessions and three non-consecutive sessions prolapsed disk with nerve symptoms. - Spinal surgery. - There is a definite structural damage in the neck. - severe mental illnesses.

Age

From **20 years** old to **45 years** old

Gender

Male

Phase

N/A

Groups that have been masked

- Outcome assessor
- Data analyser

Sample size

Target sample size: **36**

Actual sample size reached: **72**

Randomization (investigator's opinion)

Randomized

Randomization description

Samples are selected according to the criteria for entering the research and are randomly divided into three groups.

Blinding (investigator's opinion)

Single blinded

Blinding description

Outcome evaluator and data analyzer are kept blind. The assessor was blinded to the group allocation.

Placebo

Not used

Assignment

Parallel

Other design features

-

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

KHARAZMI UNIVERSITY

Street address

TEHRAN

City

TEHRAN

Province

Tehran

Postal code

1493944541

Approval date

2019-05-12, 1398/02/22

Ethics committee reference number

IR.KHU.REC.1398.011

Health conditions studied

1

Description of health condition studied

non-specific Chronic neck pain

ICD-10 code

xiii

ICD-10 code description

Diseases of the musculoskeletal system and connective tissue

Primary outcomes

1

Description

pain rate

Timepoint

pre and post test

Method of measurement

Pain Visual Scale

2

Description

Disability

Timepoint

pre and post test

Method of measurement

Neck Disability Questionnaire

3

Description

electromyography

Timepoint

pre and post test

Method of measurement

Electromyographic Device

4

Description

alignment of scapula

Timepoint

pre and post test

Method of measurement

caliper

5

Description

Kinesiophobia

Timepoint

pre and post

Method of measurement

Tampa Scale for Kinesiophobia

Secondary outcomes

1

Description

Scapular kinematics-

Timepoint

pre and post test

Method of measurement

IMU Sensor,

2

Description

flexion relaxation phenomenon

Timepoint

pre and post test

Method of measurement

Electromyographic Device

3

Description

Self-efficacy

Timepoint

pre and post test

Method of measurement

Self-efficacy Questionnaire

4

Description

Quality of life

Timepoint

pre and post test

Method of measurement

SF-36 Questionnaire

5

Description

Pain catastrophizing

Timepoint

pre and post

Method of measurement

Pain catastrophizing Scale

6

Description

Self-efficacy for pain management

Timepoint

pre and post

Method of measurement

Self-efficacy for pain management

7

Description

Self-efficacy for physical function

Timepoint

pre and post

Method of measurement

Self-efficacy for physical function

8

Description

Fear-Avoidance Beliefs

Timepoint

pre and post

Method of measurement

Fear-Avoidance Beliefs Questionnaire (FABQ)

9

Description

Depression

Timepoint

pre and post

Method of measurement

Depression Questionnaire

10

Description

Anxiety

Timepoint

pre and post

Method of measurement

Anxiety Questionnaire

11

Description

range of motion of neck

Timepoint

pre and post test

Method of measurement

IMU Sensor

Intervention groups

1

Description

Intervention group: CORRECTIVE exercise;scapula stabilization exercises were performed with and without resistance. In non-resistance exercises, body weight was used to perform the exercises, and in the exercises with resistance, free weights and elastic bands were used as resistance exercises. . . The CFT aimed at altering the perception of pain consisted of patient education regarding the multidimensional nature of ongoing pain, management of flair-ups, visual and kinesthetic motor imagery , functional training, and mirror feedback . Rest time between each set was 30 seconds and between each exercise one minute.

Category

Treatment - Other

2

Description

Intervention group: CORRECTIVE exercise whit Cognitive Functional exercises;The CFT consisted of patient education regarding the multidimensional nature of ongoing pain, management of flair-ups, visual and kinesthetic motor imagery , functional training, and mirror feedback. The CFT aimed at altering the perception of pain consisted of patient education regarding the multidimensional nature of ongoing pain, management of flair-ups, visual and kinesthetic motor imagery , functional training, and mirror feedback

Category

Treatment - Other

3

Description

Control group: The control group attended a single session where they were instructed in a home exercise program mainly focused on posture during daily task as well as demonstrations of lifting, pushing, pulling tasks as well as office ergonomics (computer placement, chair and desk adjustments etc.).

Category

N/A

Recruitment centers

1

Recruitment center

Name of recruitment center

Health Center of Kharazmi University

Full name of responsible person

amir letafat kar

Street address

karaj- University Square-Kharazmi University-Faculty of Physical Education and Sport Sciences

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Sponsors / Funding sources

1

Sponsor

Name of organization / entity

kharazmi University

Full name of responsible person

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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

kharazmi University

Proportion provided by this source

20

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

Academic

Person responsible for general inquiries

Contact

Name of organization / entity

kharazmi University

Full name of responsible person

noorollah javdaneh

Position

-

Latest degree

Ph.D.

Other areas of specialty/work

Sports Rehabilitation

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Person responsible for scientific inquiries**Contact****Name of organization / entity**

kharazmi University

Full name of responsible person

noorollah javdaneh

Position

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Latest degree

Ph.D.

Other areas of specialty/work

Sports Rehabilitation

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Person responsible for updating data**Contact****Name of organization / entity**

kharazmi University

Full name of responsible person

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Latest degree

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Other areas of specialty/work

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

Yes - There is a plan to make this available

Study Protocol

Yes - There is a plan to make this available

Statistical Analysis Plan

Yes - There is a plan to make this available

Informed Consent Form

Yes - There is a plan to make this available

Clinical Study Report

Yes - There is a plan to make this available

Analytic Code

Yes - There is a plan to make this available

Data Dictionary

Yes - There is a plan to make this available

Title and more details about the data/document

Only part of the data, such as dependent variables, The average of all samples, can be shared in scientific articles.

When the data will become available and for how long

The date of access is September 2019.

To whom data/document is available

Personal information is confidential and General outcomes in paper form Available to everyone..

Under which criteria data/document could be used

Information is not available to anyone. General outcomes in paper form Available to everyone.

From where data/document is obtainable

Noorollah javdaneh Phone: 09176616415 Email: njavdaneg68@gmail.com

What processes are involved for a request to access data/document

-

Comments