Clinical Trial Protocol
Iranian Registry of Clinical Trials

08 Nov 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 Jhavdane

Name of organization / entity
Kharazmi university

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Iran (Islamic Republic of)

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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 tesr
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

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

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Sponsors / Funding sources

1

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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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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
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Comments