

Clinical Trial Protocol

Iranian Registry of Clinical Trials

27 Jun 2026

Assessment of the effect of hand exercise on functional indexes of hand in patients with hand osteoarthritis

Protocol summary

Study aim

The effect of hand exercise on hand functional indexes in patients with osteoarthritis

Design

Clinical trial with intervention and control group, Double blind, randomized with sample size of 40 Patients. Forty packed envelopes are prepared for the patients. Rheumatologist will randomly give the patient an envelope after the diagnosis and refer him to the therapist ,who will exercise the patient or place him on the waiting list according to the envelope type. Therefore, the researcher, patient, and rheumatologist do not know the intervention type.

Settings and conduct

The place of study will be Rheumatology Clinic of Zanjan Vali-e-asr Hospital.

Participants/Inclusion and exclusion criteria

Inclusion criteria: People over the age of 40 who have clinical symptoms of hand osteoarthritis; the presence of bouchard nodule, or heberden nodule in the interdigital joints, of hand fingers ; Symptoms of osteoarthritis in hand x-rays. Non-inclusion criteria: Participate in exercise therapy for hands in the last 6 months; Hand Intra-articular injection in the last 3 months; History of hand joint replacement or joint prosthesis; patients who candidate undergoing surgery during the study; Participate in other interventional studies; Use of cane and walker and armpit; recent use of therapeutic creams.

Intervention groups

Intervention group: A group of 20 patients will be treated at home for 4 weeks. Control group: The second group includes 20 patients will be in a waiting list. After 4 weeks, this group will also do home exercise.

Main outcome variables

Hand function; Hand power; Hand pain; Hand fatigue

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20190715044220N1**

Registration date: **2020-01-24, 1398/11/04**

Registration timing: **registered_while_recruiting**

Last update: **2020-01-24, 1398/11/04**

Update count: **0**

Registration date

2020-01-24, 1398/11/04

Registrant information

Name

Iraj Alibiglou

Name of organization / entity

Country

Iran (Islamic Republic of)

Phone

+98 24 3302 3236

Email address

iraj-ab@zums.ac.ir

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2019-07-11, 1398/04/20

Expected recruitment end date

2020-02-19, 1398/11/30

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Assessment of the effect of hand exercise on functional indexes of hand in patients with hand osteoarthritis

Public title

The effect of exercise on patients with osteoarthritis of hand

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria:

People over the age of 40 who have clinical symptoms of hand osteoarthritis The presence of bouchard nodule, in the interdigital joints of the hand fingers The presence of heberden nodule in the interdigital joints of the hand fingers Osteoarthritis symptoms on hand X-ray

Exclusion criteria:

Participate in hands-on exercises in the last 6 months Hand Intra-articular injection in the last 3 months History of hand joint replacement or hand joint prosthesis Participate in other interventional studies Use of cane and walker and armpit Rheumatologic disease or other hand diseases, such as CTS or tendinitis History of hand major trauma Patients with systemic diseases, such as diabetes and ..., who have neuropathy patients who candidate undergoing surgery during the study recent use of therapeutic creams

Age

From **40 years** old

Gender

Both

Phase

N/A

Groups that have been masked

- Participant
- Investigator

Sample size

Target sample size: **40**

Randomization (investigator's opinion)

Randomized

Randomization description

Samples will be selected using simple random allocation method, taking into account entry and exit criteria and the randomization tool is the sealed envelope.

Blinding (investigator's opinion)

Double blinded

Blinding description

40 packed envelopes are prepared for the patients. Rheumatologist will randomly give the patient an envelope after the diagnosis and refer him to the therapist ,who will exercise the patient according to the envelope type, or place him on the waiting list. Therefore, the researcher, patient, and rheumatologist do not know the intervention type.

Placebo

Not used

Assignment

Crossover

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Ethics committee of Zanzan University of Medical Sciences

Street address

Zanzan university of medical sciences, Azadi Sq. zanzan

City

Zanzan

Province

Zanzan

Postal code

4515613191

Approval date

2019-07-13, 1398/04/22

Ethics committee reference number

IR.ZUMS.REC.1398.155

Health conditions studied

1

Description of health condition studied

Hand Osteoarthritis

ICD-10 code

M19.049

ICD-10 code description

osteoarthritis of hand

Primary outcomes

1

Description

Improved hand function

Timepoint

4 weeks after intervention

Method of measurement

FIHOA questionnaire

2

Description

Improved hand strength

Timepoint

4 weeks after intervention

Method of measurement

FIHOA questionnaire

3

Description

Improved hand pain

Timepoint

4 weeks after intervention
Method of measurement
FIHOA questionnaire

4

Description
Improved hand fatigue
Timepoint
4 weeks after intervention
Method of measurement
FIHOA questionnaire

Secondary outcomes

empty

Intervention groups

1

Description
Intervention group: A group of 20 patients are treated with home exercise for 4 weeks. Special Exercise for Hand Fingers Osteoarthritis (includes Finger Stretch, Make a Fist, Finger Lift and Thumb Touch which are done 10 times each exercise) will be done 3 times daily.
Category
Rehabilitation

2

Description
Control group: A group of 20 patients will be on the waiting list for home exercise after 4 weeks
Category
Rehabilitation

Recruitment centers

1

Recruitment center
Name of recruitment center
Rheumatology Clinic - Zanjan Valiasr Hospital
Full name of responsible person
Alireza Sadeghi
Street address
Shariati St., Valiasr Hospital
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4515776978
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+98 24 3302 3264
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Sadeghialireza@yahoo.com

Sponsors / Funding sources

1

Sponsor
Name of organization / entity
Zanjan University of Medical Sciences
Full name of responsible person
Dr.Alireza Shoghli
Street address
Zanjan University of Medical Sciences ,Azadi square,
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Phone
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Email
shoghli@zums.ac.ir
Web page address
http://zums.ac.ir
Grant name
Grant code / Reference number
Is the source of funding the same sponsor organization/entity?
Yes
Title of funding source
Zanjan University of Medical Sciences
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
Academic

Person responsible for general inquiries

Contact
Name of organization / entity
Zanjan University of Medical Sciences
Full name of responsible person
Alireaz Sadeghi
Position
Associate professor
Latest degree
Subspecialist
Other areas of specialty/work
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Person responsible for scientific inquiries

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Person responsible for updating data

Contact

Name of organization / entity
Zanjan University of Medical Sciences
Full name of responsible person
Iraj Alibiglou
Position
Resident
Latest degree
Medical doctor

Other areas of specialty/work
Internal Medicine
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Zanjan
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4515776978
Phone
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iraj-ab@zums.ac.ir

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

Not applicable

Informed Consent Form

Yes - There is a plan to make this available

Clinical Study Report

Not applicable

Analytic Code

Not applicable

Data Dictionary

Not applicable

Title and more details about the data/document

All data is shareable

When the data will become available and for how long

Since the end of 1398

To whom data/document is available

public

Under which criteria data/document could be used

There is no specific requirement

From where data/document is obtainable

Responsive person email address

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

One month after the written request to Responsive person

Comments