Clinical Trial Protocol
Iranian Registry of Clinical Trials

07 Nov 2026

The effect of aquatic exercise program on pain, dryness, motor function, happiness, body composition and hip circumference of elderly men with osteoarthritis of the knee

Protocol summary

Study aim

Evaluation of the effects of aquatic exercise program on pain, dryness, motor function, happiness, body composition and hip circumference in elderly men with knee osteoarthritis

Design

The sample size in this study was 40 people who were randomly divided into 2 experimental groups (aquatic exercise) and control group. 48 hours before and after the aquatic exercise, the Womak and Happiness questionnaires were filled out by both groups, and measurements of body composition and hip circumference were completed and analyzed by all subjects.

Settings and conduct

The participants of the experimental group start the aquatic exercise training program for 6 weeks under the supervision of the researcher (in the Kosar pool in Rasht). The water aquatic program was performed three times a week for 50 minutes.

Participants/Inclusion and exclusion criteria

Inclusion criteria: 1) Age over 65 years 2) Gender (Man) 3) Have a history of at least 6 months of knee osteoarthritis Exclusion criteria: 1) Inability to perform aquatic exercises 2) Taking supplements and medications to reduce knee pain during the month before the study

Intervention groups

Aquatic exercise training group (20 people), control group (20 people)

Main outcome variables

Womak Questionnaire Indices (including pain, dryness, motor function) and Happiness Questionnaire, body mass index and hip circumference

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20180503039517N10**
Registration date: **2021-04-07, 1400/01/18**
Registration timing: **prospective**

Last update: **2021-04-07, 1400/01/18**
Update count: **0**

Registration date

2021-04-07, 1400/01/18

Registrant information

Name

Soleyman Ansari Kolachahi

Name of organization / entity

Country

Iran (Islamic Republic of)

Phone

+98 13 3375 2906

Email address

solomonansari@phd.iaurasht.ac.ir

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2021-04-14, 1400/01/25

Expected recruitment end date

2021-04-25, 1400/02/05

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title
The effect of aquatic exercise program on pain, dryness, motor function, happiness, body composition and hip circumference of elderly men with osteoarthritis of the knee

Public title
The effect of aquatic exercise program on pain, dryness, motor function, happiness, body composition and hip circumference of elderly men with osteoarthritis of the knee

Purpose
Education/Guidance

Inclusion/Exclusion criteria

Inclusion criteria:
Age over 65 years Gender (Man) Have a history of at least 6 months of knee osteoarthritis

Exclusion criteria:
Inability to perform aquatic exercises Taking supplements and medications to reduce knee pain during the month before the study

Age
From **65 years** old

Gender
Male

Phase
N/A

Groups that have been masked

- Outcome assessor
- Data analyser

Sample size
Target sample size: **40**

Randomization (investigator's opinion)
Randomized

Randomization description
40 males with osteoarthritis of the knee will be selected by available sampling method. Through a lottery (participants' names were written on paper and will be divided into experimental and control groups through random lottery)

Blinding (investigator's opinion)
Double blinded

Blinding description
In this research, responsible for collecting and processing the data, the type of intervention, and the participants in the research groups are unaware.

Placebo
Not used

Assignment
Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee
The ethics committee of Islamic Azad University, Rasht Branch

Street address
Islamic Azad University, Rasht Branch, Lakan Blv

City
Rasht

Province
Guilan

Postal code
۴۱۴۷۶۵۴۹۱۹

Approval date
2020-08-17, 1399/05/27

Ethics committee reference number
IR.IAU.RASHT.REC.1399.036

Health conditions studied

1

Description of health condition studied
knee osteoarthritis

ICD-10 code
M17

ICD-10 code description
Osteoarthritis of knee

Primary outcomes

1

Description
Womak Questionnaire Indicators (including pain, dryness, motor function)

Timepoint
48 hours before and after the exercise intervention

Method of measurement
WOMAC Questionaire

2

Description
Happiness and satisfaction of life

Timepoint
48 hours before and after the exercise intervention

Method of measurement
Oxford Happiness Questionnaire - Short Form

3

Description
Body composition (body mass index, fat percentage and hip circumference)

Timepoint
48 hours before and after the exercise intervention

Method of measurement
Measure height and weight, subcutaneous fat and hip circumference with scales, tape measure and caliper

Secondary outcomes

empty

Intervention groups

1

Description
Intervention group: Intervention group: The experimental group starts the aquaticexercise training program for 6 weeks under the supervision of the researcher (in the Kosar pool in Rasht). The aquatic exercise program is done three times a week for 50 minutes. At the end of the sixth week, the final evaluation is performed and the participants complete the Womak questionnaire again and their weight, height, fat percentage and thigh circumference are measured again.

Category
Rehabilitation

2

Description
Control group: At the beginning and end of the study, they complete the Womak questionnaire and their weight, height, fat percentage and thigh circumference are measured again.

Category
Rehabilitation

Recruitment centers

1

Recruitment center

Name of recruitment center
Zibaknar Sports Club

Full name of responsible person
Jamshid Ansari

Street address
Rasht - Zibaknar - Seyed Al-Shohada Street

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4419865615

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Sponsors / Funding sources

1

Sponsor

Name of organization / entity
Islamic Azad University

Full name of responsible person
Alireza Seidavi

Street address
Islamic Azad University of Rasht Branch, Lakan Blv

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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
Islamic Azad University

Proportion provided by this source
100

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
Academic

Person responsible for general inquiries

Contact

Name of organization / entity
Islamic Azad University

Full name of responsible person
Soleyman Ansari Kolachahi

Position
Non faculty doctor

Latest degree
Specialist

Other areas of specialty/work
Sport Medicine

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second floor, Adibsaber Apartment, next to Esparo restaurant, Prof. Samei Blv.

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Person responsible for scientific inquiries

Contact

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Latest degree
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Person responsible for updating data

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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
There is no further information
Study Protocol
No - There is not a plan to make this available
Statistical Analysis Plan
No - There is not a plan to make this available
Informed Consent Form
Yes - There is 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
Title and more details about the data/document
Raw and processed data
When the data will become available and for how long
Start of access period from 1401
To whom data/document is available
Academic researchers, research colleagues and participants
Under which criteria data/document could be used
Use research results and data in future meta-analysis research
From where data/document is obtainable
Corresponding Author
What processes are involved for a request to access data/document
Request the researcher via email
Comments