Clinical Trial Protocol
Iranian Registry of Clinical Trials

22 Nov 2026

The effects of aquatic exercises in shallow and deep water on balance, proprioception, muscle strength and quality of life in chronic Ischemic stroke male patients

Protocol summary

Study aim
Determining the effect of aquatic exercises at two different depths on balance, proprioception, muscle strength and quality of life in male patients with chronic ischemic stroke

Design
This clinical trial study with pretest and posttest design was performed on 36 patients with chronic ischemic stroke by available sampling method and classified into 3 groups equal 12: experimental group1 (shallow practice); experimental group 2 (deep training) and control group

Settings and conduct
Examination in the hospital and the protocol for water therapy in the pool. In general, the stages of this research include: 1. Preparing the subjects along with examining the criteria for entering and preparing the data collection tool: General information, general health and TGE, MMSE, SF36, MRC, NIHSS, MRS.

Participants/Inclusion and exclusion criteria
A score of 23 and above is from the Mini Mental State Exam score of 21 to 44 from the berg balance scale the TUG test time of less than 13 seconds

Intervention groups
groups did the aquatic exercise therapy program that included of 18 sessions in 6 weeks and 3 sessions per week for 30 minutes. But the control group did not experience any aquatic exercise

Main outcome variables
balance, proprioception, muscle strength and quality of life

General information

Reason for update

Acronym

IRCT registration information
IRCT registration number: **IRCT20180513039626N1**
Registration date: **2018-06-30, 1397/04/09**
Registration timing: **retrospective**

Last update: **2018-06-30, 1397/04/09**
Update count: **0**

Registration date
2018-06-30, 1397/04/09

Registrant information

Name
Hossein Babaeipour

Name of organization / entity
دانشگاه ولی عصر رفسنجان

Country
Iran (Islamic Republic of)

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Recruitment status
Recruitment complete

Funding source

Expected recruitment start date
2018-02-20, 1396/12/01

Expected recruitment end date
2018-04-04, 1397/01/15

Actual recruitment start date
2018-03-16, 1396/12/25

Actual recruitment end date
2018-05-05, 1397/02/15

Trial completion date
empty

Scientific title
The effects of aquatic exercises in shallow and deep water on balance, proprioception, muscle strength and quality of life in chronic Ischemic stroke male patients

Public title
"The effect of Hydrotherapy in patients with stroke"
Purpose
Prevention
Inclusion/Exclusion criteria
Inclusion criteria:
Patients with cerebral stroke and chronic, ischemic stroke desire to participate in the research 40 to 70 years the first stroke Patients have at least 6 months from the onset of the disease and have a maximum of 2 years have the ability to stand without help (at least 5 minutes) all subjects must be able to walk with or without the aid (at least 10 meters) To have the ability to follow orders not participating in regular physical activity and not having a physical therapy program during the study
Exclusion criteria:
Having a disrupted dizziness Having a certain diseases
Age
From **40 years** old to **70 years** old
Gender
Male

Phase
N/A
Groups that have been masked
No information
Sample size
Target sample size: **45**
Randomization (investigator's opinion)
Not randomized
Randomization description
Blinding (investigator's opinion)
Not blinded
Blinding description
Placebo
Not used
Assignment
Parallel
Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee
Name of ethics committee
Rafsanjan University of Medical Sciences
Street address
دانشگاه علوم پزشکی رفسنجان، میدان علی ابن ابی طالب
City
Rafsanjan
Province
Kerman
Postal code
7717933777
Approval date
2018-03-15, 1396/12/24
Ethics committee reference number
IR.RUMS.REC.1396.207

Health conditions studied

1

Description of health condition studied
stroke
ICD-10 code
I63.9
ICD-10 code description
Cerebral infarction, unspecified

Primary outcomes

1

Description
Balance
Timepoint
6 weeks
Method of measurement
Biodex

2

Description
proprioception
Timepoint
6 weak
Method of measurement
gonimetr

3

Description
muscular strength
Timepoint
6 weak
Method of measurement
MRC scale

4

Description
quality of life
Timepoint
6 weak
Method of measurement
SF-36

Secondary outcomes

empty

Intervention groups

1

Description
Intervention group: The first group (shallow) intervenes in depth, with water up to the height of the pelvis, the

subjects performed this training session for 6 weeks (18 sessions) and 3 sessions per week for the implementation of the water exercise protocol.

Category

Rehabilitation

2

Description

Intervention group: The second group of interventions (deep) takes place deep in the water to the height of the chest, the subjects performed this training session for 6 weeks (18 sessions) and 3 sessions per week for the implementation of the water exercise protocol.

Category

Rehabilitation

3

Description

Control group: (Without exercise) that the group did not experience any blueprints that had their normal routine during these six weeks.

Category

N/A

Recruitment centers

1

Recruitment center

Name of recruitment center

بیمارستان علی ابن ابی طالب رفسنجان

Full name of responsible person

hossein babaei pour

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Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Rafsanjan University of Medical Sciences

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

Rafsanjan University of Medical Sciences

Proportion provided by this source

50

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

The University Shahid Bahonar of Kerman and Faculty of Valiasr University Rafsanjan

Full name of responsible person

Hossein Babaeipour

Position

Phd student

Latest degree

Master

Other areas of specialty/work

Sport Injuries and Corrective Exercises

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Contact

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Sharing plan

Deidentified Individual Participant Data Set (IPD)
Yes - There is 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
Yes - There is a plan to make this available

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

Title and more details about the data/document
Physical and mental dimension of the patient

When the data will become available and for how long
After defending the thesis

To whom data/document is available
All researchers in this area

Under which criteria data/document could be used
After defending the thesis

From where data/document is obtainable
hossinbabaei1906@yahoo.com

What processes are involved for a request to access data/document
Every time you order

Comments