Clinical Trial Protocol
Iranian Registry of Clinical Trials

07 Nov 2026

The effect of eight weeks of combination of Frankel and Cawthorne Cooksey exercises on physical and Psychological Function of patients with parkinson disease

Protocol summary

Study aim

to investigate the effect of a week of combined Cawthorne-Cocksey and Frankel exercises on physical and psychological function of patients with Parkinson's disease.

Design

A quasi-experimental trial was conducted, with a sample of 30 people selected from among Parkinson's patients who had referred to the Isfahan Parkinson's Patients Charity Association.

Settings and conduct

This study was conducted at the University of Isfahan under the supervision of a physician and by a researcher, and the patients, the person who took the tests, and the person who analyzed the data were unaware of the researcher's exact purpose.

Participants/Inclusion and exclusion criteria

Inclusion criteria: Age range 60-80 years old; Parkinson's disease (score 1-3 of Hoehn and Yahr scale); Voluntary consent to participate in research; without other neurological and musculoskeletal diseases. Exclusion criteria: Having a history of surgery or fracture in lower limb. Participating in physical programs at the same time; Non-regular participation in sessions; Not completing tests; Occurrence the conditions that prevent the patient from participating in research; Voluntary withdrawal from participation in research; Having inner ear or other neurological diseases.

Intervention groups

The experimental group received the intervention of Cawthorne Cooksey and Frankel combined exercises, and the control group went about their normal life routine and taking their medications.

Main outcome variables

In this study, static balance, dynamic balance, muscle strength, range of motion, walking speed, fear of falling, and quality of life of patients were measured.

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20241009063315N1**
Registration date: **2025-05-27, 1404/03/06**
Registration timing: **retrospective**

Last update: **2025-05-27, 1404/03/06**
Update count: **0**

Registration date

2025-05-27, 1404/03/06

Registrant information

Name

Nafise Asadollahi

Name of organization / entity

Country

Iran (Islamic Republic of)

Phone

+98 31 3793 2571

Email address

nasadollahi12@gmail.com

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2025-01-19, 1403/10/30

Expected recruitment end date

2025-03-20, 1403/12/30

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title
The effect of eight weeks of combination of Frankel and Cawthorne Cooksey exercises on physical and Psychological Function of patients with parkinson disease

Public title
Studying the effect of exercise on Parkinson's disease

Purpose
Supportive

Inclusion/Exclusion criteria

Inclusion criteria:
Age range 60 to 80 years old Suffering from Parkinson's disease (score 1-3 based on Hoehn and Yahr scale) Voluntary consent to participate in research Absence of other neurological and musculoskeletal diseases

Exclusion criteria:
Having a history of surgery or fracture in the lower limb Participate in the program Physical exercise at the same time as conducting research Not participating regularly in training sessions (absence in five alternating sessions or three consecutive sessions) Not completing research tests Unforeseen circumstances that occur prevent the patient from participating in the research Voluntary withdrawal from participation in research Diseases and disorders of the inner ear (vestibular system) Having other neurological diseases other than Parkinson's, such as MS, Alzheimer's, etc.

Age
From **60 years** old to **80 years** old

Gender
Both

Phase
N/A

Groups that have been masked
No information

Sample size
Target sample size: **30**

Randomization (investigator's opinion)
Randomized

Randomization description
First, 30 patients were selected as a sample through a convenient and purposeful method (scores one to three based on the Hoon and Yar scale) and were randomly and pairedly divided into two experimental and control groups of fifteen people based on the Hoehn and Yahr scale.

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
Ethical Committee of Isfahan University

Street address
Building No. 4, Vice President for Research and Technology, Isfahan University of Medical Sciences and Health Services, Hezar Jerib Street

City
Isfahan

Province
Isfehan

Postal code
8174673461

Approval date
2024-09-23, 1403/07/02

Ethics committee reference number
IR.UI.REC.1403.088

Health conditions studied

1

Description of health condition studied
Parkinson's disease

ICD-10 code
G20

ICD-10 code description
Parkinson's disease

Primary outcomes

1

Description
The effect of exercise protocol on static balance in patients with Parkinson's disease.

Timepoint
Static balance was measured first before the start of training and then after two months of training.

Method of measurement
Sharpend Romberg test

2

Description
Determining the effect of exercise protocol on dynamic balance in patients with Parkinson's disease.

Timepoint
Dynamic balance was measured first before the start of training and then after two months of training.

Method of measurement
Timed up and Go test

3

Description
Determining the effect of exercise protocol on muscle strength in patients with Parkinson's disease.

Timepoint
Muscle strength was measured first before the start of training and then after two months of training.

Method of measurement
Digital hand-held dynamometer

4

Description
Determining the effect of the exercise protocol on the range of motion of patients with Parkinson's disease.
Timepoint
The patients' range of motion was measured first before starting the exercises and then after two months of training.
Method of measurement
goniometer

5

Description
Determining the effect of the exercise protocol on the walking speed of patients with Parkinson's disease.
Timepoint
Walking speed was measured first before the start of training and then after two months of training.
Method of measurement
10 meter walking test

6

Description
Determining the effect of an exercise protocol on the fear of falling in patients with Parkinson's disease .
Timepoint
Fear of falling was measured first before the training began and then after two months of training.
Method of measurement
Fear of falling questionnaire

7

Description
Determining the effect of an exercise protocol on the quality of life of patients with Parkinson's disease.
Timepoint
Quality of life was measured first before the start of the exercises and then after two months of training.
Method of measurement
Specific questionnaire on quality of life for patients with Parkinson's disease

Secondary outcomes

empty

Intervention groups

1

Description
The first group: the training group that did Cawthorne Cooksey and Frankel combined exercises for 2 months three sessions a week and each one hour session under the supervision of a corrective movement trainer and a neurologist.Each training session consisted of a 10-minute warm-up, 20 minutes of Cawthorne-cooksey exercises, 20 minutes of Frankel exercises, and a 10-minute cool-down.Frankel exercises are an exercise method that focuses on the lower extremities and improves balance and coordination, and involve a series of slow, repetitive movements performed in sitting, standing, and lying positions. Cawthorne-cooksey exercises are part of the vestibular exercises that lead to improved balance.
Category
Rehabilitation

2

Description
Control group: second group: who went about their usual life and taking medicines.
Category
N/A

Recruitment centers

1

Recruitment center
Name of recruitment center
Isfahan Parkinson Patients Charity
Full name of responsible person
Gholam Ali Ghasemi
Street address
Alley 58 (Payam), Keshavarz Boulevard, Shahid Mofateh Intersection towards Simin Intersection
City
Isfahan
Province
Isfehan
Postal code
8185648491
Phone
+98 31 3776 3834
Email
gh.ghasemi@spr.ui.ac.ir
Web page address
https://sprold.ui.ac.ir/~gh.ghasemi/

Sponsors / Funding sources

1

Sponsor
Name of organization / entity
Esfahan University of Medical Sciences
Full name of responsible person
Hamidreza Mirsafian
Street address
Isfahan, Azadi Square, Isfahan University, Faculty of Sports Sciences
City
Isfahan
Province
Isfehan
Postal code

8174673441

Phone
+98 31 3793 2571

Fax
+98 31 3668 7572

Email
Gh.ghasemi@spr.ui.ac.ir

Web page address
https://sprold.ui.ac.ir/~gh.ghasemi/

Grant name
Vice President for Research, University of Isfahan

Grant code / Reference number

Is the source of funding the same sponsor organization/entity?
Yes

Title of funding source
Esfahan 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
Esfahan University of Medical Sciences

Full name of responsible person
Gholam Ali Ghasemi

Position
university professor

Latest degree
Ph.D.

Other areas of specialty/work
Sport Medicine

Street address
Azadi Square, Isfahan University, Faculty of Sports Sciences

City
Isfahan

Province
Isfehan

Postal code
8174673441

Phone
0098 31-3793257

Fax
+98 31 3668 7572

Email
gh.ghasemi@spr.ui.ac.ir

Web page address
https://sprold.ui.ac.ir/~gh.ghasemi/

Person responsible for scientific inquiries

Contact

Name of organization / entity
Esfahan University of Medical Sciences

Full name of responsible person
Gholam Ali Ghasemi

Position
university professor

Latest degree
Ph.D.

Other areas of specialty/work
Sport Medicine

Street address
Azadi Square, Isfahan University, Faculty of Sports Sciences

City
Isfahan

Province
Isfehan

Postal code
8174673441

Phone
+98 31 3793 2571

Fax
+98 31 3668 7572

Email
Gh.ghasemi@spr.ui.ac.ir

Web page address
https://sprold.ui.ac.ir/~gh.ghasemi/

Person responsible for updating data

Contact

Name of organization / entity
Esfahan University of Medical Sciences

Full name of responsible person
Gholam Ali Ghasemi

Position
university professor

Latest degree
Ph.D.

Other areas of specialty/work
Sport Medicine

Street address
Azadi Square, Isfahan University, Faculty of Sports Sciences

City
Isfahan

Province
Isfehan

Postal code
8174673441

Phone
+98 31 3793 2571

Fax
+98 31 3668 7572

Email
Gh.ghasemi@spr.ui.ac.ir

Web page address
https://sprold.ui.ac.ir/~gh.ghasemi/

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
All data is potentially shareable after de-identifying individuals
When the data will become available and for how long
The access period starts 1 month after the results are published
To whom data/document is available
university professors
Under which criteria data/document could be used
If you bring the name of the researcher and give a reference
From where data/document is obtainable
Send a message to my email.
What processes are involved for a request to access data/document
About 1 to 2 weeks
Comments