

Clinical Trial Protocol

Iranian Registry of Clinical Trials

10 Jun 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)

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+98 31 3793 2571

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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

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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

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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

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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

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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

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