Clinical Trial Protocol
Iranian Registry of Clinical Trials

31 Oct 2026

Effect of equilibrium exercise on physiologic, movement and balance variables among Parkinson's patients

Protocol summary

Study aim

Comparing PD patients' balance following a period of selective balance exercise Comparing PD patients' lower body power following a period of selective balance exercise Comparing PD patients' walking time following a period of selective balance exercise

Design

A pretest-posttest scheme was developed in two groups. This is a quasi-experimental study. A total of PD patients visiting Imam Ali Hospital of Zahedan, Iran were randomly selected. They suffered from moderate PD. The patients were randomly assigned in two 15-memebr groups. Inclusion Criteria - No history of specific disease - Lack of regular exercise in the past month Written consents were taken from the patients. Then the participants are familiarized with the exercise protocol. Control group has no exercise. The experiment group experiences 8 weeks of training (3 sessions per week). In the first 15-minute session, 5 minutes is dedicated to warm up, 8 for the exercise, and 2 minutes for cooling. Two minutes are added to the exercise until the 8th week. The duration of sessions is gradually added to 45 minutes.

Settings and conduct

After co-ordination and obtaining the necessary permits, patients are introduced to the clinic and, after filling out the personal profile and conscientious intention of participating in the research by the patient, an initial test is performed and patients are familiar with the practice protocol and after the end of eight weeks again Tests are conducted for the final evaluation of the intervention and control group. The control group is untrained.

Participants/Inclusion and exclusion criteria

En Diagnosis of Parkinson's Disease Moderate Severe Parkinson's Disease There is no specific disease There is no regular physical activity in the last month

Intervention groups

Selective equilibrium exercises emphasizing re-learning of natural movements and maintaining balance in Parkinson's patients and the control group consisting of Parkinson's patients who only follow the drug.

Main outcome variables

Strength of the lower muscles of the trunk, walking speed, balance

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20171030037099N1**
Registration date: **2018-01-21, 1396/11/01**
Registration timing: **retrospective**

Last update: **2018-01-21, 1396/11/01**
Update count: **0**

Registration date

2018-01-21, 1396/11/01

Registrant information

Name

Name of organization / entity

Country

Iran (Islamic Republic of)

Phone

+98 54 3322 3779

Email address

alinezhad_shirin@yahoo.com

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2017-11-22, 1396/09/01

Expected recruitment end date

2017-12-22, 1396/10/01

Actual recruitment start date

2017-11-22, 1396/09/01

Actual recruitment end date
2018-01-20, 1396/10/30
Trial completion date
empty

Scientific title
Effect of equilibrium exercise on physiologic, movement and balance variables among Parkinson's patients

Public title
Effect of equilibrium exercise on physiologic, movement and balance variables among Parkinson's patients
Purpose
Supportive
Inclusion/Exclusion criteria
Inclusion criteria:
Moderate Parkinson's Disease lack of Chronic cardiac disease No regular physical activity or physiotherapy intervention during the study time Not having open surgery in the past 6 months to one year
Exclusion criteria:
Severe back pain Urinary incontinence, chronic cough, hemorrhoids Surgery in six months to one year
Age
No age limit
Gender
Both

Phase
N/A
Groups that have been masked
No information
Sample size
Target sample size: **30**
Actual sample size reached: **30**
Randomization (investigator's opinion)
Randomized
Randomization description
30 patients with moderate severity will be divided into two groups
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
Ethics Committee of Zahedan University of Medical Sciences and Health Services
Street address
Dr Hasabie Square, Persian Gulf Blvd - Campus Administrative Complex, Zahedan University of Medical Sciences and Health Services
City
ZAHEDAN
Province
Sistan-va-Balouchestan
Postal code
98167-43463
Approval date
2017-06-18, 1396/03/28
Ethics committee reference number
IR.ZAUMS.oth.REC.1396.2

Health conditions studied

1

Description of health condition studied
Parkinson disease
ICD-10 code
G20
ICD-10 code description
Parkinson disease

Primary outcomes

1

Description
balance
Timepoint
Before the intervention and 8 weeks after the intervention
Method of measurement
The Berg equilibrium test is used to measure the static equilibrium.

2

Description
Strength of the lower limb muscles
Timepoint
Before the intervention and 8 weeks after the intervention
Method of measurement
To measure the strength of the lower muscles of the trunk, a digital dynamometer is used.

3

Description
Walking time
Timepoint
Before the intervention and 8 weeks after the intervention
Method of measurement
TIME UP & GO is used for walking time.

Secondary outcomes

empty

Intervention groups

1

Description
Intervention group: The exercises are selected for 8 weeks, 3 training sessions per week, 15 minutes of exercise, and 45 minutes at the end of the course.
Category
Rehabilitation

Recruitment centers

1

Recruitment center
Name of recruitment center
Ali Ibn Abi Talib (AS) Supplemental Hospital
Full name of responsible person
Shirin Ali nezhad
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Sponsors / Funding sources

1

Sponsor
Name of organization / entity
University of Sistan and Baluchestan
Full name of responsible person
Research Deputy of Sistan and Baluchestan University
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Zahedan, University Blvd, Central Organization of Sistan and Baluchestan University
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Shahdadi@hamoon.usb.ac.ir
Grant name
Grant code / Reference number
Is the source of funding the same sponsor organization/entity?
Yes
Title of funding source
University of Sistan and Baluchestan
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
University of Sistan and Baluchestan
Full name of responsible person
Ahmad Shahdadi
Position
Assistant Professor
Latest degree
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Person responsible for scientific inquiries

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Associate professor
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Person responsible for updating data

Contact
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Sharing plan

Deidentified Individual Participant Data Set (IPD)
Undecided - It is not yet known if there will be 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
Undecided - It is not yet known if there will be a plan to make this available
Informed Consent Form
No - There is not 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