Clinical Trial Protocol
Iranian Registry of Clinical Trials

08 Nov 2026

The Effect of Sensory Reweighting as a Method of Balance Exercises on Postural Control in Patients with Parkinson's Disease

Protocol summary

Summary

The aim of this study is to investigate the effect of sensory reweighting as a method of balance exercises on postural control in Patients with Parkinson's disease. In this clinical trial study, 40 patients with idiopathic Parkinson's disease are randomly assigned to two groups: a group receiving sensory reweighting as a method of balance exercises and control group. The main inclusion criteria include having Parkinson's disease according to neurologist diagnosis, the disease progression level of 1 to 3 according to Hoehn and Yahr Scale, the ability to perform the most difficult condition of laboratory test (quiet standing for 180 seconds while vibration is applied on the Achilles tendons of both sides and attention to visual stimulus) and an acceptable level of cognitive function, i.e. score of more than 21 on the Mini Mental Status Examination (MMSE). In case of no cooperation during the test and exercises and not returing for testing after the interventions, subjects are excluded. Intervention group receives 12 sessions of sensory reweighting as a method of balance exercises (3 sessions per week, 45-60 minutes per session). Control group does not receive these exercises. Functional balance and postural control are evaluated with clinical and laboratory tests before and after receiving exercises in intervention group and before and after 4 weeks in control group.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT2015040616830N4**
Registration date: **2015-05-16, 1394/02/26**
Registration timing: **registered_while_recruiting**

Last update:
Update count: **0**

Registration date

2015-05-16, 1394/02/26

Registrant information

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Ghorban Taghizadeh
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Recruitment status

Recruitment complete

Funding source

Iran University of Medical Sciences

Expected recruitment start date

2015-04-09, 1394/01/20

Expected recruitment end date

2016-04-08, 1395/01/20

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

The Effect of Sensory Reweighting as a Method of Balance Exercises on Postural Control in Patients with Parkinson's Disease

Public title

The effect of balance exercises on balance of patients with Parkinson's disease

Purpose

Treatment

Inclusion/Exclusion criteria
Inclusion Criteria: Having Parkinson's disease according to neurologist diagnosis; Having the disease progression level of 1 to 3 according to Hoehn and Yahr Scale; Having an acceptable level of cognitive function, i.e. score of more than 21 on the Mini Mental Status Examination (MMSE); Having the ability to walk independently and without assistive device at least 10 meters in length; Having at least a fifth grade education; Having the ability to perform the most difficult condition of laboratory test (quiet standing for 180 seconds while vibration is applied on the Achilles tendons of both sides and attention to visual stimulus); Having no other neurological diseases such as stroke according to the patient, or the patient's family or physician report; Not having any orthopedic problem (such as low back pain, arthritis, Hallux valgus, flat foot) according to the patient, or the patient's family or physician report; Not having diabetes or addiction according to the patient, or the patient's family or physician report; No history of falling during the past month according to the patient, or the patient's family report. Exclusion Criteria: Lack of patient cooperation during the test or exercises; Not return for doing tests after the intervention; Entering to the nonpharmacologic on-off phase of the disease during the study according to neurologist diagnosis; Change in the pharmacologic regimen of the patient during the study.

Age
From **55 years** old to **65 years** old

Gender
Both

Phase
N/A

Groups that have been masked
No information

Sample size
Target sample size: **40**

Randomization (investigator's opinion)
Randomized

Randomization description

Blinding (investigator's opinion)
Single 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 Iran University of Medical Sciences

Street address
Hemmat Highway, Tehran

City
Tehran

Postal code

Approval date
2014-09-20, 1393/06/29

Ethics committee reference number
93-02-125-24715-104438

Health conditions studied

1

Description of health condition studied
Parkinson's disease

ICD-10 code
G20

ICD-10 code description
Extrapyramidal and movement disorders

Primary outcomes

1

Description
Postural control

Timepoint
before and after intervention

Method of measurement
forceplate

Secondary outcomes

1

Description
Functional balance and mobility

Timepoint
before and after intervention

Method of measurement
Fuctional reach test, Berg Balance Scale, Time Up&Go test

Intervention groups

1

Description
Intervention group: receives 12 sessions of sensory reweighting as a method of balance exercises (3 sessions per week, 45-60 minutes per session). Exercises include proprioceptive, visual, vestibular, combination of proprioceptive and vestibular, combination of visual and vestibular, combination of proprioceptive and visual stimulations.

Category
Rehabilitation

2

Description

Control group: does not receive these exercises.

Category

Rehabilitation

Recruitment centers

1

Recruitment center

Name of recruitment center

Occupational therapy clinic, School of Rehabilitation, Iran University of Medical Sciences

Full name of responsible person

Street address

City

Tehran

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Vice Chancellor for research of Iran University of Medical Sciences, Dr. Seyed Ali Javad Moosavi

Full name of responsible person

Dr Mossavi

Street address

Iran University of Medical Sciences

City

Tehran

Grant name

Grant code / Reference number

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

Yes

Title of funding source

Vice Chancellor for research of Iran University of Medical Sciences, Dr. Seyed Ali Javad Moosavi

Proportion provided by this source

100

Public or private sector

empty

Domestic or foreign origin

empty

Category of foreign source of funding

empty

Country of origin

Type of organization providing the funding

empty

Person responsible for general inquiries

Contact

Name of organization / entity

Iran University of Medical Sciences

Full name of responsible person

Ghorban Taghizadeh

Position

Master of Sciense

Other areas of specialty/work

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Web page address

Sharing plan

Deidentified Individual Participant Data Set (IPD)

empty

Study Protocol

empty

Statistical Analysis Plan

empty

Informed Consent Form

empty

Clinical Study Report

empty

Analytic Code

empty

Data Dictionary

empty