Clinical Trial Protocol
Iranian Registry of Clinical Trials

17 Sep 2026

The Effect of Whole Body Vibration on Balance and fear of falling in the elderly

Protocol summary

Study aim
The Effect of Whole Body Vibration on Balance and fear of falling in the elderly
Design
A concealed, randomized, blinded, sham controlled clinical trial with a parallel group design of 40 patients, will enrolled between March 2020 and September 2020.
Settings and conduct
This study will be carried out at the Neuromuscular Rehabilitation Center of Semnan University of Medical Sciences. After allocation, two groups were randomly assigned into intervention and control groups, a blinded assessor, will evaluate the balance in elderly.Then, an experienced therapist, intervened the participants via the whole body vibration for the intervention group for 12 sessions. After the intervention, the static and dynamic balance of the participants will be evaluated by the blinded evaluator of the target group.
Participants/Inclusion and exclusion criteria
1- Men and women over 60 years old 2- Able to walk without the help of others and not to use crutches and other aids
Intervention groups
In this study, the elderly aged 60 years and older will assigned into two intervention and control groups.
Main outcome variables
Static and dynamic balance indices including overall, anterior-posterior and medial-lateral.

General information

Reason for update
Acronym
IRCT registration information
IRCT registration number: **IRCT20200203046353N1**
Registration date: **2020-02-16, 1398/11/27**
Registration timing: **prospective**
Last update: **2020-02-16, 1398/11/27**
Update count: **0**
Registration date
2020-02-16, 1398/11/27

Registrant information
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Recruitment status
Recruitment complete
Funding source

Expected recruitment start date
2020-03-05, 1398/12/15
Expected recruitment end date
2020-09-15, 1399/06/25
Actual recruitment start date
empty
Actual recruitment end date
empty
Trial completion date
empty

Scientific title
The Effect of Whole Body Vibration on Balance and fear of falling in the elderly

Public title
The Effect of Whole Body Vibration on Balance
Purpose
Treatment
Inclusion/Exclusion criteria
Inclusion criteria:
Men and women over 60 years old Able to walk without

the help of others and not to use crutches and other aids

Exclusion criteria:

Age

From **60 years** old

Gender

Both

Phase

N/A

Groups that have been masked

- Investigator
- Data analyser

Sample size

Target sample size: **40**

Randomization (investigator's opinion)

Randomized

Randomization description

Subjects were randomly assigned into intervention and control groups according to the inclusion criteria. Subjects will be randomly assigned to either intervention or control groups following the simple randomization method.

Blinding (investigator's opinion)

Double blinded

Blinding description

1. The person who evaluates the results of the study will also blind the allocation of the groups. 2. An individual analyzing the results will also blind the allocation of groups.

Placebo

Not used

Assignment

Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Ethics Committee of Semnan University of Medical Sciences

Street address

Basij Blvd,

City

Semnan

Province

Semnan

Postal code

۹۹۹۵۱- ۳۵۱۹۸

Approval date

2019-12-17, 1398/09/26

Ethics committee reference number

IR.SEMUMS.REC.1398.210

Health conditions studied

1

Description of health condition studied

Elderly

ICD-10 code

Z76.8

ICD-10 code description

Persons encountering health services in other specified circumstances

Primary outcomes

1

Description

overall, anterior- posterior and medial-lateral of balance

Timepoint

Measurement of the balance before and immediately after 12 sessions of whole body vibration

Method of measurement

BIODEX instrument

Secondary outcomes

1

Description

Fear Of Falling

Timepoint

Before and after intervention

Method of measurement

Fall Efficacy Scale(FES)

Intervention groups

1

Description

Intervention group:Whole body vibration for 12 sessions, 3 sessions per week at 35 Hz, 10 repetitions with 60 seconds, 60 seconds rest between each repetition.

Category

Rehabilitation

Recruitment centers

1

Recruitment center

Name of recruitment center

Ibn-e-Sina Rehabilitation Clinic

Full name of responsible person

aliakbar pahlevanian

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Next to Sepah Bank., 17 shahrivar Blvd., Semnan town

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Sponsors / Funding sources

1

Sponsor
Name of organization / entity
Semnan University of Medical Sciences
Full name of responsible person
Dr Parviz Kokhaei, Research & Technology Deputy of University
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Basij Blvd., Semnan., Semnan Province
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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
Semnan 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
Other

Person responsible for general inquiries

Contact
Name of organization / entity
Semnan University of Medical Sciences
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Lecturer
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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

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