Clinical Trial Protocol
Iranian Registry of Clinical Trials

08 Nov 2026

The effect of six weeks balance training program on kinematic of walking in elderly people

Protocol summary

Summary

The aim of this present study was to examine the effect of 6 weeks balance training on some of the kinematic features of walking in elderly woman. For this purpose, 20 elderly woman whose static and dynamic balance was at the standard level according to the results of BBS and TUG tests participated voluntarily in this study. They were randomly divided to control and experiment groups.Criteria to participate in research without affecting diseases such as walk orthopedic problems, cardiovascular, neurological, and visual and performing sports activities are not prohibited by the Physician. Exclusion criteria, subjects not participated in regular exercise, illness and death are considered. Subjects in each group took part in a walking test in a pre-test session followed by a post-test after 6 weeks. During this period, subjects in the experiment group did the balance training systematically for 3 sessions in a week, overall were trained for 18 sessions balance training until engage somatosensory, visual, vestibular systems such as(jumping out of the hole, gait by 8, crossing obstacle, walking with heel) which monitored by the scholar while the control group followed their ordinary lives.Whereas the control group the normal activities of daily follow-up.Research outcomes to improve the length and width of the steps, walking speed and double the time dependence of these factors could predict falls in the elderly says.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT2013061513672N1**
Registration date: **2013-12-14, 1392/09/23**
Registration timing: **retrospective**

Last update:
Update count: **0**

Registration date

2013-12-14, 1392/09/23

Registrant information

Name
Sahar Mohammadzadeh
Name of organization / entity
Shahid Beheshti University
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Recruitment status

Recruitment complete

Funding source

Physical Education Faculty of Shahid Beheshti Universityand Reasercher individual

Expected recruitment start date

2012-05-21, 1391/03/01

Expected recruitment end date

2012-05-30, 1391/03/10

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

The effect of six weeks balance training program on kinematic of walking in elderly people

Public title

The effect balance training on gait

Purpose

Other

Inclusion/Exclusion criteria

(Inclusion criteria: no disease affecting gait such as diabetes meter bridge; Parkinson; Multiple sclerosis; Alzheimer's disease; neuropathy in the diabetes, stroke; depression; fatigue, bone or fracture in the lower extremity; extremity surgery; drug addiction; amputation as a result of an accident; psychotropic drugs; persistent dizziness and cardiovascular problems; neurological diseases; tumor Head; joint disorders, orthopedic, Exclusion criteria: not participate and cooperate in the exercise; illness and death of participants)

Age
From **60 years** old to **75 years** old

Gender
Female

Phase
N/A

Groups that have been masked
No information

Sample size
Target sample size: **20**

Randomization (investigator's opinion)
Randomized

Randomization description

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
Shahid Beheshti University

Street address
Daneshjou boulevard, Velenjak, Shahid Beheshti University

City
Tehran

Postal code

Approval date
2011-02-20, 1389/12/01

Ethics committee reference number
12929

Health conditions studied

1

Description of health condition studied
Aging

ICD-10 code
Z72.3

ICD-10 code description
Lack of physical exercise

Primary outcomes

1

Description
Knematic Gait

Timepoint
Before the intervtionention, Six weeks after the interven

Method of measurement
Motion Analysis System with 8 Cameras

Secondary outcomes

1

Description
Balance

Timepoint
Before the intervention, Six weeks after the interventions

Method of measurement
Balance Biodex System

2

Description
Kinematic Gait with Dual Task

Timepoint
Before the intervention and after six weeks the intervention

Method of measurement
Motion Analysis System with 8 cameras red madon

3

Description
Kinematic Gait with Crossing the Obstacle

Timepoint
Before the intervention and after six weeks the intervention

Method of measurement
Motion Analysis System with 8 cameras red madon

4

Description
Kinematic Gait in Obscure

Timepoint
Before the intervention and after six weeks the intervention

Method of measurement
Motion Analysis System with 8 cameras red madon

Intervention groups

1

Description
Balance training in intervention 1- Puddle juming 2- walk

up a few stairs or step over a few obstacle 3 – seated arm swings 4- Walking with arms swings 5- Keeping you on your toes 6-walking on your toes 7- Heel – touch and roll –up 8-walking with Country – western heel and toe 9-walking straight and narrow with eyes blocked 10-walking stare to picture 11- reach (reach with knees straight and feet parallel, reach with hip back and feet offset) 12- Rock forward , knee lift 13- walk up a few stairs or step over a few obstacle 14 – walk with pickup line 15- practice sit to stand and stand to sit 16- walk figure- eight obstacle curse 17- head turns siting 18-practice with jimball on wall 19-pull back on jimball 20-stand up and forward with jimball 21- place your best foot on the step Program intervention for six weeks three sessions per week for an hour(static exercisefor 10 seconds or tens repetition and exercise dynamic walking 12 times in the six yards four timesby looking at the sight, and 4 times with dual task (counting numbers) and 4 times with eyes closed)

Category
Other

2

Description
Control Group

Category
Other

Recruitment centers

1

Recruitment center

Name of recruitment center
Velanjak Saray Mahalle

Full name of responsible person
Mrs. Faghihi

Street address
Velanjak Saray Mahalle, Negin park, Yasaman Place, Velenjak

City
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Sponsors / Funding sources

1

Sponsor

Name of organization / entity
Shahid Beheshti University

Full name of responsible person
Fariborz Hovanlo

Street address
Daneshjo boulevard, Velenjak, Shaahid Beheshti University

City
Tehran

Grant name

Grant code / Reference number

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

Title of funding source
Shahid Beheshti University

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
Shahid Beheshti University

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Position
Motor Behavior Master

Other areas of specialty/work

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Person responsible for scientific inquiries

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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