

Clinical Trial Protocol

Iranian Registry of Clinical Trials

18 Jun 2026

The effect of physical exercise on controlling balance among the visually impaired elderly using auditory vibratory alarming feedback device.

Protocol summary

Study aim

The aim of the current research is to study the effect of physical exercise on controlling balance among the visually impaired elderly using auditory vibratory alarming feedback device

Design

This is an experimental and randomized trial that includes aged 65 to 74 years old volunteering volunteers who were living in Mahabad. According to the information on physical and motor health records, 30 were selected, which consisted of two groups of 15 visually impaired people.

Settings and conduct

The Center for Educational Rehabilitation was used in Mahabad, where special mattresses used in taekwondo sport were embedded. The instrument was to detect the interaction of the subjects using a Stabilometer balance device. Subjects were then divided into two groups of 15, who performed balance exercises in 12 sessions.

Participants/Inclusion and exclusion criteria

visually impaired elderly with healthy from the nerve and skeletal aspect.

Intervention groups

A group performed only physical exercises that caused various sensation to be balanced and the other group performed the physical exercises with the use of the biofeedback device.

Main outcome variables

The balance

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20190107042265N1**

Registration date: **2019-07-07, 1398/04/16**

Registration timing: **retrospective**

Last update: **2019-07-07, 1398/04/16**

Update count: **0**

Registration date

2019-07-07, 1398/04/16

Registrant information

Name

Hadi Gevorki

Name of organization / entity

The University of Shahid Beheshti Tehran

Country

Iran (Islamic Republic of)

Phone

+98 44 4222 7439

Email address

hadigevorki@yahoo.com

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2018-04-21, 1397/02/01

Expected recruitment end date

2018-04-30, 1397/02/10

Actual recruitment start date

2018-04-30, 1397/02/10

Actual recruitment end date

2018-04-30, 1397/02/10

Trial completion date

2018-07-01, 1397/04/10

Scientific title

The effect of physical exercise on controlling balance among the visually impaired elderly using auditory vibratory alarming feedback device.

Public title

using auditory-vibratory alarming feedback device on balance

Purpose

Prevention

Inclusion/Exclusion criteria

Inclusion criteria:

the visually impaired elderly

Exclusion criteria:

developing neurological disease having a history of a skeletal disease

Age

From **65 years** old to **74 years** old

Gender

Male

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

In this study, a randomized random method was used, so that individuals are divided into two groups of physical exercise and physical training group along with the use of biofeedback device.

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 Shahid Beheshti University of Tehran

Street address

Shahid Beheshti University of Tehran

City

Tehran

Province

Tehran

Postal code

1983969411

Approval date

2018-12-01, 1397/09/10

Ethics committee reference number

IR.SBU.ICBS.97/1035

Health conditions studied

1

Description of health condition studied

low vision

ICD-10 code

H54.2

ICD-10 code description

Low vision, both eyes

Primary outcomes

1

Description

Change the score slightly balance

Timepoint

after 6 weeks of training.

Method of measurement

balance measurement device Stabilometer

Secondary outcomes

1

Description

Change the score slightly balance

Timepoint

Before the intervention and 45 days after the start of the training.

Method of measurement

balance test stabilometer device

Intervention groups

1

Description

Intervention group 1: only did the physical training provided by examiner to change the balance score.

Category

Rehabilitation

2

Description

Intervention group: They performed the physical exercise provided by the examiner, and received an equilibrium warning from the feedback device attached to the subjects waist, including vibration and sound through the headphones.

Category

Rehabilitation

Recruitment centers

1

Recruitment center

Name of recruitment center

Mahabad elderly center

Full name of responsible person

Hadi Gevorki

Street address

No.34, Esteghlal Square, 24 meters street to the hospital.

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Mahabad

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Sponsors / Funding sources

1

Sponsor**Name of organization / entity**

The university of shahid Beheshty

Full name of responsible person

Morteza Rezaei Zadeh

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Shahid Chamran highway, Yemen street, Shahid Shahriari Square.

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Grant name

Morteza Rezaei Zadeh

Grant code / Reference number**Is the source of funding the same sponsor organization/entity?**

Yes

Title of funding source

The university of shahid Beheshty

Proportion provided by this source

100

Public or private sector

Private

Domestic or foreign origin

Domestic

Category of foreign source of funding

empty

Country of origin**Type of organization providing the funding**

Persons

Person responsible for general inquiries

Contact**Name of organization / entity**

The University of Shahid Beheshty

Full name of responsible person

Hadi Gevorki

Position

student

Latest degree

Ph.D.

Other areas of specialty/work

motor behavior

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Person responsible for updating data

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Position

PhD student

Latest degree

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Other areas of specialty/work

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Sharing plan**Deidentified Individual Participant Data Set (IPD)**

No - There is not a plan to make this available

Justification/reason for indecision/not sharing IPD

In the form of an ethical commitment, both participants are assured that their data will be serialized.

Study Protocol

No - There is not a plan to make this available

Statistical Analysis Plan

No - There is not 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