Clinical Trial Protocol
Iranian Registry of Clinical Trials

22 Nov 2026

The effect of Locomotor Trainng and Virtual Reality-based Balance Training in Multiple Sclerosis

Protocol summary

Summary

Patients in this clinical trial, are suffering from one of two common types of MS, Relapsing-remitting or Secondary progressive, which their diagnosis is based on definite criteria in neurology covered by the MS Society. After obtaining the inclusion criteria, patients' gait and balance in the study, will be evaluated by different methods. Walking speed and stability for 6 meters will be determined. Balance through Romberg test, Berg balance score (Berg Balance test) and the device is evaluated. After division in two groups, exercise and control group will consist of 15 patients in each. Exercise group will be training for 12 weeks, 2 sessions per week and each session includes 20 minutes of balance exercises. After balance training, patients' balance will be evaluated through Romberg test and Berg balance test 6 meter linear system.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT201201094641N5**
Registration date: **2012-04-27, 1391/02/08**
Registration timing: **registered_while_recruiting**

Last update:
Update count: **0**

Registration date

2012-04-27, 1391/02/08

Registrant information

Name

Bina Eftekharsadat

Name of organization / entity

Tabriz university of medical sciences

Country

Iran (Islamic Republic of)

Phone

+98 41 1330 3193

Email address

binasadat@tbzmed.ac.ir

Recruitment status

Recruitment complete

Funding source

Physical Medicine and Rehabilitation Center, Tabriz University of Medical Sciences

Expected recruitment start date

2012-01-21, 1390/11/01

Expected recruitment end date

2012-09-19, 1391/06/29

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

The effect of Locomotor Trainng and Virtual Reality-based Balance Training in Multiple Sclerosis

Public title

Balance training in multiple sclerosis

Purpose

Supportive

Inclusion/Exclusion criteria

Inclusion criteria: patients with one common type of MS (relapsing-remitting or secondary progressive); balance disorder. Exclusion criteria: no history of diabetes; No history of limb trauma; no previous surgery of the upper and lower limbs and joints; Not having myasthenia gravis; No history of myopathy; No history of heart or lung disease or stroke.

Age

From **15 years** old to **60 years** old

Gender

Both

Phase
N/A
Groups that have been masked
No information
Sample size
Target sample size: **30**
Randomization (investigator's opinion)
Not 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
Vice-chancellor for research, Tabriz university of medical sciences
Street address
Tabriz university of medical sciences
City
Tabriz
Postal code
Approval date
2011-02-28, 1389/12/09
Ethics committee reference number
9095

Health conditions studied

1

Description of health condition studied
multiple sclerosis
ICD-10 code
G35
ICD-10 code description
Multiple sclerosis

Primary outcomes

1

Description
balance testing by machine
Timepoint
6 month
Method of measurement
balance training machine

Secondary outcomes

1

Description
walking for 6m-romberg test-berg balance score
Timepoint
6 month
Method of measurement
balance traning machine

Intervention groups

1

Description
exercise group will be training for 12 weeks 2 sessions per week and each session includes 20 minutes of balance exercises.After training, walking speed and stability will be determined for 6 meters.balance will be evaluated by berg balance score and romberg test.patients will be evaluated after 2 month again.
Category
Rehabilitation

2

Description
no interference.
Category
N/A

Recruitment centers

1

Recruitment center
Name of recruitment center
Imam reza hospital/Physical Medicine Research Center/MS Society
Full name of responsible person
Dr Bina Eftekhar Sadat
Street address
City
Tabriz

Sponsors / Funding sources

1

Sponsor
Name of organization / entity
Physical Medicine and Rehabilitation, Tabriz University of Medical Sciences
Full name of responsible person
Dr Seyyed Kazem Shakoori
Street address
Physical Medicine and Rehabilitation centre, Imam reza hospital, The golgasht street, Azadi avenue
City
Tabriz

Grant name
Grant code / Reference number
Is the source of funding the same sponsor organization/entity?
Yes
Title of funding source
Physical Medicine and Rehabilitation, Tabriz University of Medical Sciences
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
Tabriz university of medical sciences
Full name of responsible person
Elnaz Azari
Position
Intern
Other areas of specialty/work
Street address
Tabriz university of medical science, Golgasht street, Azadi avenue
City
Tabriz
Postal code
5166616471
Phone
+98 41 1337 6923
Fax
Email
elnaz.azari@gmail.com , elnaz.azary@yahoo.com
Web page address

Person responsible for scientific inquiries

Contact
Name of organization / entity
Physical Medicine and Rehabilitation Center, Imam reza hospital
Full name of responsible person
Dr Bina Eftekhar Sadat
Position
Associate Professor of Physical Medicine and Rehabilitation
Other areas of specialty/work
Street address
Physical Medicine and Rehabilitation Center, Imam reza hospital, The Golgasht street, Azadi avenue
City
Tabriz
Postal code
Phone
+98 41 1385 7765
Fax
Email
binasadat@yahoo.com
Web page address

Person responsible for updating data

Contact
Name of organization / entity
Full name of responsible person
Elnaz Azari
Position
Other areas of specialty/work
Street address
City
Postal code
Phone
Fax
Email
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