

Clinical Trial Protocol

Iranian Registry of Clinical Trials

05 Aug 2026

The effect of Locomotor Training 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

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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 Training 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 training 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 Eftekhari 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

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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