Clinical Trial Protocol
Iranian Registry of Clinical Trials

02 Nov 2026

Efficacy of dual task versus single task training on balance and functional mobility in patient with multiple sclerosis

Protocol summary

Summary

In the research literature the effect of dual tasks were explored on postural control and balance in subjects such as old aged people and cases with stroke. Although persons with Multiple Sclerosis (MS) commonly have walking and balance control impairments, there were not found any evidences that study the efficacy of dual task on movement performance of MS patients. So the aim of the study is to examine the effect of dual task intervention (movement_cognitive) on dynamic and static balance, functional mobility and walking speed in women with MS. 36 participants (expanded disability status scale: 3-7) are divided randomly in to three groups (control, single task and dual task). A pre test and post test are taken in order to measure balance, functional mobility and walking speed via, respectively, BIODEX, Up and Go walking test and 25 feet walking test. It should be noted that these tests are valid and reliable.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT201408188436N2**
Registration date: **2014-09-07, 1393/06/16**
Registration timing: **registered_while_recruiting**

Last update:
Update count: **0**

Registration date

2014-09-07, 1393/06/16

Registrant information

Name

Hossein Ali Ebrahimi

Name of organization / entity

Neurology Research Center

Country

Iran (Islamic Republic of)

Phone

+98 34 1246 7500

Email address

hebrahimi@kmu.ac.ir

Recruitment status

Recruitment complete

Funding source

Neurology Research Center - Kerman University of medical sciences

Expected recruitment start date

2014-08-18, 1393/05/27

Expected recruitment end date

2015-08-18, 1394/05/27

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Efficacy of dual task versus single task training on balance and functional mobility in patient with multiple sclerosis

Public title

Efficacy of dual task on multiple sclerosis

Purpose

Other

Inclusion/Exclusion criteria

Inclusion criteria: the MS patients confirmed by MS committee of Kerman University of Medical Sciences; the EDSS between 3-7; cooperation of MS patients. Exclusion criteria: combined with other disease; the demographic and position criteria of three groups should be same.

Age

From **18 years** old to **50 years** old

Gender

Female

Phase
N/A
Groups that have been masked
No information
Sample size
Target sample size: **54**
Randomization (investigator's opinion)
Randomized
Randomization description
Blinding (investigator's opinion)
Double blinded
Blinding description
Placebo
Not used
Assignment
Parallel
Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee
Name of ethics committee
Ethic committee of Deputy of Research
Street address
Jahad Blvd - Ebne Sina Avenue - Kerman - Iran
City
Kerman
Postal code
Approval date
2010-08-20, 1389/05/29
Ethics committee reference number
93/42/کا

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
dynamic balance
Timepoint
rate of deviation(0-10)
Method of measurement
by Biodex instrument

2

Description
functional mobility 25 foot walking
Timepoint
timed 25 foot walking (seconds)
Method of measurement
time measurment

3

Description
up and go duratin
Timepoint
duration (seconds)
Method of measurement
time measurment

Secondary outcomes

empty

Intervention groups

1

Description
In the present study intervention protocol involve a variety of balance tasks which is done 45 min three days a week during one month. The patients are 15-18 cases
Category
Rehabilitation

2

Description
In the present study intervention protocol involve a variety of balance tasks which is done 45 min three days a week during one month. These tasks are done along with a cognitive task as dual task condition. The patients are 15-18 cases.
Category
Rehabilitation

3

Description
in this present stdy the contrl group is (18-15) patients (MS) that age and EDSS are same with intervention group, but balanced task has not done, only functional mobility and dynamic balance tests evaluated at first and after one month.
Category
Rehabilitation

Recruitment centers

1

Recruitment center
Name of recruitment center
Neurology Research Center- Kerman University of medcal sciences

Full name of responsible person
Hossein Ali Ebrahimi M.D
Street address
Kosar Blvd
City
Kerman

Sponsors / Funding sources

1

Sponsor
Name of organization / entity
Neurology Research Center - Kerman University of medical sciences
Full name of responsible person
Gholam Reza Sepehri M.D
Street address
Somayeh Cross way - Deputy of Research -Kerman University of medical sciences
City
Kerman
Grant name
Grant code / Reference number
Is the source of funding the same sponsor organization/entity?
Yes
Title of funding source
Neurology Research Center - Kerman 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
Neurology research center, Kerman University of medical sciences
Full name of responsible person
Hossein Ali Ebrahimi
Position
Professor
Other areas of specialty/work
Street address
No.14, 3rd Sharghi, 17 alley, Parvin Etesami Avenue
City
Kerman
Postal code
76136 93685
Phone
+98 34 1246 7500
Fax
Email
hebrahimi@kmu.ac.ir
Web page address

Person responsible for scientific inquiries

Contact
Name of organization / entity
Faculty of Physical Education and Sports Sciences, Shahid Bahonar University
Full name of responsible person
Mahshid Zare Zade
Position
Assistant professor
Other areas of specialty/work
Street address
Faculty of Physical Education and Sports Science, Shahid Bahonar University
City
Kerman
Postal code
Phone
+98 34 1244 1615
Fax
Email
zarezade.mahshid@gmail.com
Web page address

Person responsible for updating data

Contact
Name of organization / entity
Shahid Bahonar University
Full name of responsible person
Farnaz Saeed
Position
MSc
Other areas of specialty/work
Street address
Shahid Bahonar University
City
Kerman
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