

Clinical Trial Protocol

Iranian Registry of Clinical Trials

10 Jun 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

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Name of organization / entity

Neurology Research Center

Country

Iran (Islamic Republic of)

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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

93/42/15

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 measurement

3

Description

up and go duratin

Timepoint

duration (seconds)

Method of measurement

time measurement

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 medical sciences

Full name of responsible person

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medical sciences**Full name of responsible person**

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

Yes

Title of funding sourceNeurology 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**

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Farnaz Saeed

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MSc

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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