Clinical Trial Protocol
Iranian Registry of Clinical Trials

24 Jun 2026

Effects of balance training on patients with diabetic neuropathy

Protocol summary

Summary
Peripheral neuropathy is one of the common complaints of diabetes. Peripheral neural damage in turn will cause balance impairments in diabetic patients. The purpose of this study was to investigate the effects of balance exercises on sway indices in diabetic patients with neuropathy. Ten diabetic patients diagnosed with peripheral neuropathy and ten healthy aged-matched subjects participated in the study as experiment and normal groups. Participants in both groups were examined for balance abilities with the Biodex Balance System (BBS). All tests were done in eyes open and closed condition on bilateral and unilateral standing. After ten sessions of balance training for experimental group, they were re-examined in the same way again.

General information

Acronym
IRCT registration information
IRCT registration number: **IRCT138905094441N2**
Registration date: **2010-07-31, 1389/05/09**
Registration timing: **retrospective**

Last update:
Update count: **0**
Registration date
2010-07-31, 1389/05/09

Registrant information
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Recruitment status
Recruitment complete
Funding source
Iran University of Medical Sciences

Expected recruitment start date
2009-11-15, 1388/08/24
Expected recruitment end date
2010-06-15, 1389/03/25
Actual recruitment start date
empty
Actual recruitment end date
empty
Trial completion date
empty

Scientific title
Effects of balance training on patients with diabetic neuropathy

Public title
Balance training in diabetic neuropathy
Purpose
Treatment
Inclusion/Exclusion criteria
Inclusion: Age between 35 to 60 Diagnosed peripheral neuropathy which confirmed with electrodiagnostic tests. The ability to stand on both, and single leg. Exclusion: diabetic ulcers in either foot. lack of blood sugar control. Internal ear infections, other nervous system impairments (except neuropathy) or other diseases affecting balance. Musculo-skeletal problems such as vertebral column or limbs deformity. History of repeated ankle sprains in the year prior to the study Severe pain influencing balance. Visual problems inability to see the stabilometer cursor. The existence of any other factors that interfere with balance except diabetic neuropathy.
Age
From **35 years** old to **60 years** old
Gender
Both

Phase
N/A
Groups that have been masked
No information
Sample size
Target sample size: **10**
Randomization (investigator's opinion)
Not randomized
Randomization description
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 Commitee Rehabilitation Faculty
Street address
Rehabilitation Sciences Faculty (IUMS), Shahnazari Street, Madar Square, Mirdamaad
City
Tehran
Postal code
1945913187
Approval date
2008-07-19, 1387/04/29
Ethics committee reference number
148

Health conditions studied

1

Description of health condition studied
Diabetic Polyneuropathy
ICD-10 code
G63.2*
ICD-10 code description
Diabetic polyneuropathy

Primary outcomes

1

Description
Improving balance, properioception
Timepoint
Before training and after 5 session of training
Method of measurement
Balance Index by Biodex Satability system

Secondary outcomes

1

Description
Risk of falling
Timepoint
six month to one year after training
Method of measurement
questionnaire follow up

2

Description
medical costs
Timepoint
six month to one year after training
Method of measurement
questionnaire follow up

Intervention groups

1

Description
No intervention in control group
Category
N/A

2

Description
Balance Training in intervention group by tilt board and Biodex stabilometer system
Category
Treatment - Devices

Recruitment centers

1

Recruitment center
Name of recruitment center
Firouzgar Hospital
Full name of responsible person
Dr Bijan Forough
Street address
Firouzgar Hospital, Vali-e-asr Square
City
Tehran

Sponsors / Funding sources

1

Sponsor
Name of organization / entity
Vice Resaech, Iran University of Medical Sciences
Full name of responsible person
Mrs Malmir
Street address
IUMS, Hemmat highway

City
Tehran
Grant name
Grant code / Reference number
Is the source of funding the same sponsor organization/entity?
Yes
Title of funding source
Vice Resaech, Iran 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
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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