Clinical Trial Protocol
Iranian Registry of Clinical Trials

22 Nov 2026

Comparative effectiveness of plantar massage and reflexology foot massage on pain, balance and functional reach among patients with peripheral neuropathy

Protocol summary

Study aim
To find out what is better in reducing neuropathic pain and increasing balance and functional reach between plantar massage and reflexology foot massage among patients with peripheral neuropathy

Design
A randomized clinical trial with two parallel intervention groups, a study of phase 3 with 18 people in each group, 36 in total.

Settings and conduct
Allied hospital Faisalabad General hospital Samanabad

Participants/Inclusion and exclusion criteria
Both genders are between 35 and 60 years old. Diagnosed patients with grade II peripheral neuropathy. Ability to stand on both feet. Can perform the given instructions. There was no cardiac problem. No fracture, injury, or amputation of the lower or upper limb. Any neurological problem. No foot or toe ulcer. There is no peripheral thrombosis. Ambulation difficulties or using any walking devices were excluded. No vision impairment.

Intervention groups
Group A: Plantar massage group Group B: Reflexology foot massage group

Main outcome variables
Pain Balance Functional reach

General information

Reason for update

Acronym

IRCT registration information
IRCT registration number: **IRCT20240311061253N1**
Registration date: **2024-05-10, 1403/02/21**
Registration timing: **prospective**

Last update: **2024-05-10, 1403/02/21**
Update count: **0**

Registration date
2024-05-10, 1403/02/21

Registrant information

Name
Rabeea Saeed

Name of organization / entity
The university of Faisalabad

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Pakistan

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Recruitment status
Recruitment complete

Funding source

Expected recruitment start date
2024-05-15, 1403/02/26

Expected recruitment end date
2024-09-26, 1403/07/05

Actual recruitment start date
empty

Actual recruitment end date
empty

Trial completion date
empty

Scientific title
Comparative effectiveness of plantar massage and reflexology foot massage on pain, balance and functional reach among patients with peripheral neuropathy

Public title
Effect of plantar massage vs reflexology foot massage on peripheral neuropathy

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria:

Age between 35 and 60 years Diagnosed patient of grade II peripheral neuropathy Ability to stand on both feet Cooperative patients Can perform given instructions Volunteered to participate

Exclusion criteria:

Cardiac problem upper limb or lower limb amputation at any level foot or toe ulcer severe visual impairment any vestibular disorder edema, peripheral thrombosis, burn, injury or fracture of lower extremity ambulation difficulties or using any walking device neurological disorders, including stroke, parkinson's disease, and dementia

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: **36**

Randomization (investigator's opinion)

Randomized

Randomization description

Simple random sampling was used for sample collection. The list of individuals was generated through online randomization generator. According to the list the participants were divided into both groups.

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

Research and Ethics / Technical committee of The University of Faisalabad

Street address

House no. 68, street no. 1 defence paradise in front of sheikhon wala railway crossing

City

Faisalabad

Postal code

38000

Approval date

2024-02-15, 1402/11/26

Ethics committee reference number

TUF/DR/SA/MSPP/2024/397

Health conditions studied

1

Description of health condition studied

Peripheral neuropathy

ICD-10 code

G90.0

ICD-10 code description

Idiopathic peripheral autonomic neuropathy

Primary outcomes

1

Description

Pain

Timepoint

Pain was measured at 0 weeks before intervention and after the application of the intervention at 3 weeks.

Method of measurement

Self-report version of the Leeds assessment of signs and symptoms of neuropathic pain scale (S-LANSS)

2

Description

Balance

Timepoint

Balance was measured at 0 weeks before intervention and after the application of the intervention at 3 weeks.

Method of measurement

Balance was measured through Berg Balance Scale (BBS)

3

Description

Functional reach

Timepoint

Functional reach was measured at 0 weeks before intervention and after the application of the intervention at 3 weeks.

Method of measurement

Functional reach was measured through functional reach test

Secondary outcomes

empty

Intervention groups

1

Description

Intervention group: plantar massage. Plantar massage will be given through sensory brush for 3 days per week dor 3 weeks. The brush will be held horizontal to the plantar aspect of the foot. Brushing will be done slowly,

never back and forth on the same spot, and with enough pressure to cause the brush's bristles to bend. The goal is to trigger the feet's pressure touch receptors rapidly. Participants will be informed that the therapy might "tickle." Massage will be given for 5 minutes on each foot

Category
Treatment - Other

2

Description
Intervention group: Reflexology foot massage group. Three weeks of foot reflexology will be conducted, with two sessions each week lasting thirty minutes, 15 minutes for each foot. Applying the reflexology method will involve raising the participant's leg level to the practitioner's chest level. Effleurage massage will be given to the dorsal area, plantar region, tibialis anterior, peroneus longus-brevis, and gastro soleus muscles for five minutes. Effleurage will be utilized to stimulate the autonomic nervous system, and also the reflex mechanism of action, capillaries, and lymphatic function. Reflexology massage will be done according to the following application protocol: solar plexus and diaphragm reflexes, adrenal gland reflexes, the arm and shoulder reflexes, the spine reflexes, the hip, thigh and leg reflexes, the sciatic nerve reflexes, solar plexus and diaphragm reflexes. All of these are done for 7*2 on each foot.

Category
Treatment - Other

Recruitment centers

1

Recruitment center

Name of recruitment center
Allied hospital Faisalabad

Full name of responsible person
Anbreena Rasool

Street address
West canal road, Faisalabad

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Sponsors / Funding sources

1

Sponsor

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The University of Faisalabad

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Grant name

Grant code / Reference number

Is the source of funding the same sponsor organization/entity?
Yes

Title of funding source
The University of Faisalabad

Proportion provided by this source
100

Public or private sector
Private

Domestic or foreign origin
Domestic

Category of foreign source of funding
empty

Country of origin

Type of organization providing the funding
Academic

Person responsible for general inquiries

Contact

Name of organization / entity
The University of Faisalabad

Full name of responsible person
Rabeea Saeed

Position
Student

Latest degree
Bachelor

Other areas of specialty/work
Physiotherapy

Street address
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Person responsible for scientific inquiries

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Person responsible for updating data

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Sharing plan

Deidentified Individual Participant Data Set (IPD)
Yes - There is a plan to make this available

Study Protocol
Yes - There is a plan to make this available

Statistical Analysis Plan
Yes - There is a plan to make this available

Informed Consent Form
Yes - There is a plan to make this available

Clinical Study Report
Yes - There is a plan to make this available

Analytic Code
No - There is not a plan to make this available

Data Dictionary
Yes - There is a plan to make this available

Title and more details about the data/document
Comparative effectiveness of plantar massage and the reflexology foot massage on pain, balance and functional reach among patients with peripheral neuropathy

When the data will become available and for how long
Starting 6 months after publication and it will remain available for everyone

To whom data/document is available
This will be available for everyone

Under which criteria data/document could be used
anbreena.rasool@tuf.edu.pk

From where data/document is obtainable
rabeeasaeed@gmail.com +923030449224

What processes are involved for a request to access data/document
Any applicant will just need to contact for the data file at rabeeasaeed@gmail.com or at +923030449224

Comments