Clinical Trial Protocol
Iranian Registry of Clinical Trials

07 Nov 2026

Comparative effects of therapeutic deep tissue foot massage with or without jasmine oil in diabetic and hypertensive patients

Protocol summary

Study aim

Therapeutic deep tissue foot message with jasmine oil in diabetes and hypertensive patients and their effects on blood pressure, heart rate, oxygen saturation, insulin level, temperature, respiration rate, lipid profile .

Design

Lottery method, community bases,parallel group, Double blinded,Randomized control trial.there were 393 patients were enrolled.

Settings and conduct

Study was conducted at Muhammad Institute of Medical and Allied Sciences Multan after approval from Institutional ethical committee.

Participants/Inclusion and exclusion criteria

Incision criteria : Age group of 25-70 years ,Both Genders (Male, Female), Educated and uneducated Diabetic patient, Hypertensive patients,Married and unmarried.Exclusion criteria: Any type of mental disability,Lactating females,Having any type of physical disability,Pregnant females,Any type of major surgery.

Intervention groups

The three treatment groups were treated with therapeutic deep tissue massage with three ways: first group was treated with jasmine oil manually massage, second group was treated electric palm massage with jasmine oil massage and third group was treated with electric palm massager with-out jasmine oil. The deep tissue foot massage was applied by three ways on the feet of diabetics and hypertensive patients for 15 consecutive days. Each session was 30 minutes per day. Massage was applied for 15 minutes on each foot. After 15 days we were compare per and post blood pressure and glucose level in hypertensive and diabetics patients. We were measure objective data heart rate, respiration rate, blood pressure, and glucose level and oxygen saturation.

Main outcome variables

Increasing insulin and blood circulation in diabetic patients and was help in reducing mean of arterial pressure (MAP), heart rate, respiratory rate, and increases oxygen saturation in hypertensive patients.

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20230103057033N1**
Registration date: **2023-01-10, 1401/10/20**
Registration timing: **retrospective**

Last update: **2023-01-10, 1401/10/20**
Update count: **0**

Registration date

2023-01-10, 1401/10/20

Registrant information

Name

Ujala Hameed

Name of organization / entity

Ali ul Murtaza Departement of Rehabilitation Multan

Country

Pakistan

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+92 316 6484756

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Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2022-06-16, 1401/03/26

Expected recruitment end date

2022-12-18, 1401/09/27

Actual recruitment start date

2022-06-01, 1401/03/11

Actual recruitment end date

2022-12-29, 1401/10/08

Trial completion date

2022-12-29, 1401/10/08

Scientific title

Comparative effects of therapeutic deep tissue foot massage with or without jasmine oil in diabetic and hypertensive patients

Public title

Therapeutic deep tissue foot massage with or without jasmine oil in diabetic and hypertensive patients

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria:

Age group of 25-70 years Both Genders (Male, Female) Hypertensive patients Married and unmarried Educated and uneducated Diabetic patients

Exclusion criteria:

Any type of mental disability Lactating females Having any type of physical disability History of chest pain, bronchitis, asthma, angina, MI Chronic illness related to cardiorespiratory ailments Any type of major surgery• Pregnant females

Age

From **25 years** old to **70 years** old

Gender

Both

Phase

2-3

Groups that have been masked

- Investigator
- Data analyser

Sample size

Target sample size: **393**

Actual sample size reached: **393**

Randomization (investigator's opinion)

Randomized

Randomization description

Simple randomization. We used sealed envelops for lotterty method and randomization of participants was done. Randomization of participants in groups by lottery method and statistical analysis without biasness

Blinding (investigator's opinion)

Double blinded

Blinding description

Double blinded study was done by keeping blind i-e the physiotherapist as Investigator and data analyser

Placebo

Not used

Assignment

Other

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Muhammad Institute of Medical and Allied Sciences Multan

Street address

No. 142, Multan

City

Multan

Postal code

66000

Approval date

2022-05-11, 1401/02/21

Ethics committee reference number

MIMAS/29/IRB/IMRAN

Health conditions studied

1

Description of health condition studied

Diabetes Mellitus

ICD-10 code

E08

ICD-10 code description

Diabetes mellitus due to underlying condition with diabetic chronic kidney disease

2

Description of health condition studied

Hypertension

ICD-10 code

I15.9

ICD-10 code description

Secondary hypertension, unspecified

Primary outcomes

1

Description

Increase in Blood circulation and insulin secretion in diabetic patients

Timepoint

3 weeks

Method of measurement

Blood glucose level by glucometer

2

Description

Mean arterial pressure

Timepoint

3 weeks

Method of measurement

Mercury manometer

3

Description
Heart rate
Timepoint
3 weeks
Method of measurement
Heart rate measuring device

4

Description
Oxygen saturation
Timepoint
3 weeks
Method of measurement
pulse oximeter

5

Description
Respiration rate
Timepoint
3 weeks
Method of measurement
manually

Secondary outcomes

1

Description
Increase in blood circulation
Timepoint
3 weeks
Method of measurement
Devices

Intervention groups

1

Description
Control group: Treated with jasmine oil.Diabetics and hypertensive patients will receive therapeutic deep tissue foot massage with jasmine oil. A glucometer will be used to monitor blood glucose levels in patients (both diabetic and hypertensive) via finger-prick testing. And blood pressure, blood cholesterol (lipid profile), oxygen saturation and temperature also monitored and body mass index (height, weight, body fat) of both diabetics and hypertensive patients before massage and after massage will be measured. After fifteen consecutive days all these parameters will be measured again.
Category
Treatment - Drugs

2

Description
Intervention group: Treated with electrical massager and jasmine oil. Therapeutic deep tissue foot massage with jasmine oil manually , electric palm massager with jasmine oil, and electric palm massager without jasmine oil will be applied in diabetics and hypertensive patients. Blood glucose level will be monitored by glucometer of patients (Diabetics and Hypertensive) by pin-prick testing. And blood pressure, blood cholesterol (lipid profile), oxygen saturation and temperature also monitored and body mass index (height, weight, body fat) of both diabetics and hypertensive patients before massage and after massage will be measured. After fifteen consecutive days all these parameters will be measured again.
Category
Treatment - Drugs

3

Description
Intervention group: Treated with electrical massager without jasmine oil.electric palm massager without jasmine oil will be applied in diabetics and hypertensive patients. Blood glucose level will be monitored by glucometer of patients (Diabetics and Hypertensive) by pin-prick testing. And blood pressure, blood cholesterol (lipid profile), oxygen saturation and temperature also monitored and body mass index (height, weight, body fat) of both diabetics and hypertensive patients before massage and after massage will be measured. After fifteen consecutive days all these parameters will be measured again.
Category
Treatment - Drugs

Recruitment centers

1

Recruitment center
Name of recruitment center
Ali-Ul-Murtaza Department of Rehabilitation Sciences,Muhammad Institute
Full name of responsible person
Maliha Khalid Khan
Street address
Hbl street sabsazar metro station
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+92 312 6827130
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DrMalihatareen@mimas.edu.pk

Sponsors / Funding sources

1

Sponsor
Name of organization / entity
Muhammad Institute of Medical and Allied Sciences, Multan
Full name of responsible person

Maliha Khalid Khan

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ujalahameed947@gmail.com

Grant name
Student fund

Grant code / Reference number
26082022

Is the source of funding the same sponsor organization/entity?
No

Title of funding source
Institutional Funding policy

Proportion provided by this source
50

Public or private sector
Public

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
Muhammad Institute od Medical and Allied Sciences, Multan.

Full name of responsible person
Maliha Khalid Khan

Position
Professor

Latest degree
Medical doctor

Other areas of specialty/work
Physiotherapy

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Person responsible for scientific inquiries

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Full name of responsible person
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Person responsible for updating data

Contact

Name of organization / entity
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Full name of responsible person
Ujala Hameed

Position
Professor

Latest degree
Medical doctor

Other areas of specialty/work
Physiotherapy

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Sharing plan

Deidentified Individual Participant Data Set (IPD)
Undecided - It is not yet known if there will be a plan to make this available

Study Protocol
Undecided - It is not yet known if there will be 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

Undecided - It is not yet known if there will be a plan to make this available

Analytic Code

Undecided - It is not yet known if there will be a plan to make this available

Data Dictionary

Undecided - It is not yet known if there will be a plan to make this available

Title and more details about the data/document

There is no further information

When the data will become available and for how long

There is no further formation

To whom data/document is available

There is no further information

Under which criteria data/document could be used

There is no further information

From where data/document is obtainable

There is no further information

What processes are involved for a request to access data/document

There is no further information

Comments

There is no further information