

Clinical Trial Protocol

Iranian Registry of Clinical Trials

11 Sep 2026

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

Protocol summary

Study aim

Therapeutic deep tissue foot massage 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 based, parallel group, double blinded, randomized control trial and 290 patients will be enrolled.

Settings and conduct

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

Participants/Inclusion and exclusion criteria

Inclusion criteria : Age group of 23-70 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 will be treated with therapeutic deep tissue massage with three ways: first group will be treated with jasmine oil manually massage, second group will be treated electric palm massage with jasmine oil massage and third group will be treated with electric palm massager with-out jasmine oil. The deep tissue foot massage will be applied by three ways on the feet of diabetics and hypertensive patients for 20 consecutive days. Each session will be 40 minutes per day. Massage will be applied for 20 minutes on each foot. After 20 days we will compare pre and post blood pressure and glucose level in hypertensive and diabetics patients. We will 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 will help in reducing mean of arterial

pressure (MAP), heart rate, respiratory rate, and increases oxygen saturation in hypertensive patients.

General information

Reason for update

We want to update title by simply placing one word (patients) at the last of line Plus also updating the position of the person responsible for scientific inquiries

Acronym

IRCT registration information

IRCT registration number: **IRCT20230103057033N2**

Registration date: **2023-02-25, 1401/12/06**

Registration timing: **registered_while_recruiting**

Last update: **2023-03-17, 1401/12/26**

Update count: **2**

Registration date

2023-02-25, 1401/12/06

Registrant information

Name

Ujala Hameed

Name of organization / entity

Ali ul Murtaza Departement of Rehabilitation Multan

Country

Pakistan

Phone

+92 316 6484756

Email address

ujalahameed947@gmail.com

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2022-11-10, 1401/08/19

Expected recruitment end date

2023-04-10, 1402/01/21

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

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

Public title

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

Purpose

Treatment

Inclusion/Exclusion criteria**Inclusion criteria:**

Age group of 23-70 years Diabetic patients Educated and uneducated Married and unmarried Hypertensive patients Both Genders (Male, Female)

Exclusion criteria:

Any type of mental disability MI Pregnant females Chronic illness related to cardiorespiratory ailments Any type of major surgery Having any type of physical disability Asthma Angina History of chest pain Bronchitis Lactating females

Age

From **23 years** old to **70 years** old

Gender

Both

Phase

1

Groups that have been masked

- Investigator
- Data analyser

Sample size

Target sample size: **290**

Randomization (investigator's opinion)

Randomized

Randomization description

Simple randomization. We will use sealed envelopes for lottery method and randomization of participants will be 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 will be 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

Hbl street

City

Multan

Postal code

66000

Approval date

2022-10-20, 1401/07/28

Ethics committee reference number

MIMAS/22/IRB/IAK.Durrani

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

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

before intervention and 3 weeks after intervention

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

empty

Intervention groups

1

Description

Control group: Will be 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 will be measured by mercury manometer, blood cholesterol (lipid profile) will be measured by lipid measuring device, oxygen saturation by pulse oximeter and temperature by thermometer will be monitored and body mass index (height, weight, body fat) of both diabetics and hypertensive patients will be measured by BMI scale before massage and after massage will be measured. After 3 weeks all these parameters will be measured again.

Category

Treatment - Drugs

2

Description

Intervention group 1: Will be 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. A glucometer will be used to monitor blood glucose levels in patients (both diabetic

and hypertensive) via finger-prick testing. And blood pressure will be measured by mercury manometer, blood cholesterol (lipid profile) will be measured by lipid measuring device, oxygen saturation by pulse oximeter and temperature by thermometer will be monitored and body mass index (height, weight, body fat) of both diabetics and hypertensive patients will be measured by BMI scale before massage and after massage will be measured. After 3 weeks all these parameters will be measured again.

Category

Treatment - Drugs

3

Description

Intervention group 2: Will be treated with electrical massager without jasmine oil. Electric palm massager without jasmine oil will be applied in diabetics and hypertensive patients. A glucometer will be used to monitor blood glucose levels in patients (both diabetic and hypertensive) via finger-prick testing. And blood pressure will be measured by mercury manometer, blood cholesterol (lipid profile) will be measured by lipid measuring device, oxygen saturation by pulse oximeter and temperature by thermometer will be monitored and body mass index (height, weight, body fat) of both diabetics and hypertensive patients will be measured by BMI scale before massage and after massage will be measured. After 3 weeks all these parameters will be measured again.

Category

Treatment - Drugs

Recruitment centers

1

Recruitment center**Name of recruitment center**

Ali-UI-Murtaza Department of Rehabilitation Sciences, Muhammad Institute

Full name of responsible person

Maliha Khalid Khan

Street address

Hbl Street

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Phone

+92 312 6827130

Email

malihatareen1997@gmail.com

Sponsors / Funding sources

1

Sponsor**Name of organization / entity**

Muhammad Institute of Medical and Allied Sciences

Full name of responsible person
Imran Ahmad Khan

Street address
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Phone
+92 333 6120602

Email
imranahmadkhandurrani@gmail.com

Grant name
Student fund

Grant code / Reference number
26012023

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

Title of funding source
Muhammad Institute of Medical and Allied Sciences

Proportion provided by this source
50

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
Muhammad Institute of Medical and Allied Sciences

Full name of responsible person
Maliha Khalid Khan

Position
Demonstrator

Latest degree
Medical doctor

Other areas of specialty/work
Physiotherapy

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Person responsible for scientific

inquiries

Contact

Name of organization / entity
Muhammad Nawaz Shareef University of Agriculture,
Multan

Full name of responsible person
Imran Ahmad Khan

Position
Coordinator Department of Pharmacology and
Physiology

Latest degree
Ph.D.

Other areas of specialty/work
Cardiovascular Pharmacology

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Person responsible for updating data

Contact

Name of organization / entity
Muhammad Institute of Medical and Allied Sciences

Full name of responsible person
Ujala Hameed

Position
Student

Latest degree
Master

Other areas of specialty/work
Physiotherapy

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Postal code
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Phone
+92 316 6484756

Email
ujalahameed947@gmail.com

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
Yes - There is a plan to make this available

Statistical Analysis Plan

Undecided - It is not yet known if there will be 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 formation

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 formation

Under which criteria data/document could be used

There is no further formation

From where data/document is obtainable

There is no further formation

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

There is no further formation

Comments

Please evaluate