Clinical Trial Protocol
Iranian Registry of Clinical Trials

07 Nov 2026

The effect of acupressure on anxiety and hemodynamic indices of elderly with hypertension: Randomized Clinical Trial

Protocol summary

Study aim
Determining the effect of acupressure on anxiety and hemodynamic parameters in the elderly with hypertension

Design
clinical trial, double-blind, randomized, total 94 people

Settings and conduct
Point P6, located on the inside of the forearm and in the cavity between the forearm bones and the size of three finger widths above the wrist crease. In the experimental group, pressure intervention on point p6 will be performed for ten minutes in both hands. In the control group, pressure was applied on the thumb. Participants will not be explained the difference between pressure in the control group and in the experimental group, and only the pressure on the P6 point or thumb flexor will be stated by the researcher.

Participants/Inclusion and exclusion criteria
Inclusion criteria: Do not use sedatives and anti-anxiety drugs, age 60-79, only patients taking Losartan 25 mg every 12 hours. Criteria for not including the sample include: the occurrence of any problems or instability in vital signs during the study.

Intervention groups
In the experimental group, the intervention, ie pressure on the p6 point, will be performed for 10 minutes in both hands. In the control group, pressure will be applied to the thumb as much as the test group.

Main outcome variables
In this study, anxiety, blood pressure and pulse of the elderly with hypertension were measured before and after the intervention.

General information

Reason for update

Acronym

IRCT registration information
IRCT registration number: **IRCT20210807052097N1**
Registration date: **2021-08-11, 1400/05/20**
Registration timing: **registered_while_recruiting**

Last update: **2021-08-11, 1400/05/20**
Update count: **0**

Registration date
2021-08-11, 1400/05/20

Registrant information

Name
Sara sadat Hosseini

Name of organization / entity

Country
Iran (Islamic Republic of)

Phone
+98 51 4324 7326

Email address
hosseinisara345@yahoo.com

Recruitment status
Recruitment complete

Funding source

Expected recruitment start date
2021-06-22, 1400/04/01

Expected recruitment end date
2021-09-23, 1400/07/01

Actual recruitment start date
empty

Actual recruitment end date
empty

Trial completion date
empty

Scientific title
The effect of acupressure on anxiety and hemodynamic indices of elderly with hypertension: Randomized Clinical Trial

Public title
The effect of acupressure on anxiety and hemodynamic

indices of elderly with hypertension

Purpose

Other

Inclusion/Exclusion criteria

Inclusion criteria:

Willingness to participate in the study Having literacy Being in the age range of 60-79 No drug addiction No anatomical and skin problems at point P6 Anxiety levels above 40 (according to Spielberger) No history of using acupressure Absence of diagnosed mental illness At least one year has passed since their doctor diagnosed high blood pressure No other underlying disease such as diabetes The type of medication used to treat high blood pressure (To prevent the possible effect of the medication taken by patients, only patients taking Losartan 25 mg every 12 hours are included in the study)

Exclusion criteria:

Reluctance to participate in further study Occurrence of any problems or instability in vital signs during the study

Age

From **60 years** old to **79 years** old

Gender

Both

Phase

N/A

Groups that have been masked

- Participant

Sample size

Target sample size: **94**

Randomization (investigator's opinion)

Randomized

Randomization description

Sampling by available method and then for randomization of sealed envelopes containing one of the numbers 1 and 2 (94 in total: 47 from each number) will be used which is selected by the samples and according to the contents of the envelope It was determined in which group it would be placed.

Blinding (investigator's opinion)

Single blinded

Blinding description

The control group receives acupressure at an ineffective point. The control group will not know if the point is ineffective.

Placebo

Not used

Assignment

Crossover

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Ethics Committee of Neishabour University of Medical Sciences

Street address

Neishabour, Baghcheban town, end of Moqawmat Boulevard, Medical Sciences Campus

City

neyshabour

Province

Razavi Khorasan

Postal code

93186-14139

Approval date

2020-09-23, 1399/07/02

Ethics committee reference number

IR.NUMS.REC.1400.005

Health conditions studied

1

Description of health condition studied

hypertension

ICD-10 code

I10

ICD-10 code description

Essential (primary) hypertension

Primary outcomes

1

Description

Anxiety score in Spielberger questionnaire

Timepoint

Before and after the intervention

Method of measurement

Spielberger Anxiety Inventory

2

Description

Systolic and diastolic blood pressure

Timepoint

Before, immediately and 30 minutes after the intervention

Method of measurement

Monitoring device made by the seekers of the path of happiness

3

Description

Pulse count

Timepoint

Before, immediately and 30 minutes after the intervention

Method of measurement

Monitoring device made by the seekers of the path of happiness

Secondary outcomes

empty

Intervention groups

1

Description
Intervention group: In the experimental group, the intervention, ie pressure on the p6 point, will be performed for ten minutes in both hands, first the right hand and then the left hand. The accuracy of the point is confirmed when the patient feels warm, heavy, swollen, or numb at that point.
Category
Treatment - Other

2

Description
Control group: In the control group, pressure was applied to the thumb as much as the experimental group.
Category
Treatment - Other

Recruitment centers

1

Recruitment center
Name of recruitment center
Neishabour city health centers
Full name of responsible person
sara sadat hosseini
Street address
Neishabour, Baghcheban town, end of Moqawmat Boulevard, Medical Sciences Campus
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Sponsors / Funding sources

1

Sponsor
Name of organization / entity
Neyshabour University of Medical Sciences
Full name of responsible person
Vice Chancellor for Research and Technology of Neishabour University of Medical Sciences
Street address
Neishabour, Baghcheban town, end of Moqawmat Boulevard, Medical Sciences Campus
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Phone
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Email
edu@nums.ac.ir
Grant name
Grant code / Reference number
Is the source of funding the same sponsor organization/entity?
Yes
Title of funding source
Neyshabour University of Medical Sciences
Proportion provided by this source
100
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
Neyshabour University of Medical Sciences
Full name of responsible person
Sara Sadat Hosseini
Position
Non-faculty instructor
Latest degree
Master
Other areas of specialty/work
Nursery
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
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
Information on the main outcome
When the data will become available and for how long
Access period starts 6 months after the results are published
To whom data/document is available
All academic, scientific, industrial
Under which criteria data/document could be used
Any analysis on the data is allowed. However, printing the article based on information is prohibited.
From where data/document is obtainable
Responsible author of the article
What processes are involved for a request to access data/document
Upon request, it will be sent via personal email (Sara Sadat Hosseini) after a maximum of 1 week. hosseinisara345@yahoo.com
Comments
After requesting the data, the data will be sent by email to the responsible author after a maximum period of one week.