

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

01 Jun 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 Spielberg) 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 Spielberg 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

##### City

Neishabour

##### Province

Razavi Khorasan

##### Postal code

93186-14139

##### Phone

+98 51 4324 7326

##### Email

hosseinisara345@yahoo.com

## 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

#### City

neyshabour

#### Province

Razavi Khorasan

#### Postal code

93186-14139

#### Phone

+98 51 4330 6201

#### 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

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##### Email

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## Person responsible for scientific inquiries

#### Contact

##### Name of organization / entity

Neyshabour University of Medical Sciences

**Full name of responsible person**

sara sadat hosseini

**Position**

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**Latest degree**

Master

**Other areas of specialty/work**

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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.

**Person responsible for updating data****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

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