Clinical Trial Protocol
Iranian Registry of Clinical Trials

06 Jul 2026

Evaluation of the effect of acupressure on anxiety of patients undergoing coronary angiography

Protocol summary

Study aim
Determining the effect of acupressure on anxiety in patients undergoing coronary angiography referred to Farshchian heart hospital in Hamadan in 1399.

Design
A randomized clinical trial with a control group, with three parallel groups

Settings and conduct
The present study will be conducted as a three-group clinical trial with the participation of 105 patients who are candidates for coronary angiography in the city of Hamadan. Participants will be randomly assigned to three groups. In group (A), intervention on GV20 points and in group (B), intervention on BL62 point will be applied for 10 minutes.The accuracy of the pressure applied by the researcher's finger to the desired point will be confirmed when the patient feels warm, heavy or numb at that point. No intervention will be performed in control group (C).Acupressure for all patients will be performed by a researcher.In this study, the one-blind method will be used. Anxiety levels will be measured by the Spielberger Situational Anxiety questionnaire, which is completed by the patient.

Participants/Inclusion and exclusion criteria
Inclusion criteria: Having a desire to participate in the study, age 35 to 60 years,Stability of vital signs including blood pressure, pulse, respiration and temperature, having an anxiety score higher than 20 based on the questionnaire. Exclusion criteria: Having any mental disorder being treated,Changes in the patient treatment process, decreased level of patient consciousness during the study

Intervention groups
Intervention in group (A) on GV20 points (in the middle of the anterior hairline or midline of the line connecting the apex of both ears) and in group (B), intervention on BL62 points (below the lower edge of the external ankle Foot) will be performed for 10 minutes, one hour before the angiography. No special action will be taken in the control group.

Main outcome variables
Anxiety

General information

Reason for update

Acronym

IRCT registration information
IRCT registration number: **IRCT20160110025929N33**
Registration date: **2020-09-21, 1399/06/31**
Registration timing: **prospective**

Last update: **2020-09-21, 1399/06/31**
Update count: **0**

Registration date
2020-09-21, 1399/06/31

Registrant information

Name
Mehdi Molavi Vardanjani

Name of organization / entity

Country
Iran (Islamic Republic of)

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+98 81 3422 5056

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m.molavi@umsha.ac.ir

Recruitment status
Recruitment complete

Funding source

Expected recruitment start date
2020-09-22, 1399/07/01

Expected recruitment end date
2021-03-19, 1399/12/29

Actual recruitment start date
empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Evaluation of the effect of acupressure on anxiety of patients undergoing coronary angiography

Public title

The effect of acupressure on anxiety of patients undergoing coronary angiography

Purpose

Health service research

Inclusion/Exclusion criteria

Inclusion criteria:

Having a desire to participate in the study Age 35 to 60 years Stability of vital signs including blood pressure, pulse, respiration and temperature Having an anxiety score higher than 20 based on the questionnaire

Exclusion criteria:

Make any changes in the patient treatment process Having any mental disorder being treated Decreased level of patient consciousness during the study

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: **105**

Randomization (investigator's opinion)

Randomized

Randomization description

Simple random allocation will be done using a random number table. Patients will be randomly divided into three groups of intervention(A,B) and control (C).

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

Ethics Committee of Hamadan University of Medical Sciences

Street address

Shahid Fahmideh St., Hamadan University of Medical Sciences, Hamadan

City

Hamadan

Province

Hamadan

Postal code

38698-65178

Approval date

2020-05-23, 1399/03/03

Ethics committee reference number

IR.UMSHA.REC.1399.222

Health conditions studied

1

Description of health condition studied

Coronary atherosclerosis

ICD-10 code

I25.1

ICD-10 code description

Atherosclerotic heart disease of native coronary artery

Primary outcomes

1

Description

Anxiety

Timepoint

Before and one hour after the intervention

Method of measurement

Spielberger Questionnaire

Secondary outcomes

empty

Intervention groups

1

Description

Intervention group A: The intervention will be applied to the GV20 points (directly in the middle of the anterior hairline or the midline of the line connecting the apex of both ears) for 10 minutes, one hour before the angiography.

Category

N/A

2

Description

Intervention group B:The intervention will be applied to the BL62 point (below the lower edge of the outer ankle) for 10 minutes, one hour before the angiography.

Category

N/A

3

Description
Control group: No special action will be taken in the control group.
Category
N/A

Recruitment centers

1

Recruitment center
Name of recruitment center
Farshchian hospital
Full name of responsible person
Babak Manafi
Street address
Shahid Fahmideh St., Hamadan University of Medical Sciences, Hamadan
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Sponsors / Funding sources

1

Sponsor
Name of organization / entity
Hamedan University of Medical Sciences
Full name of responsible person
Saeed Bashirian
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Grant name
Grant code / Reference number
Is the source of funding the same sponsor organization/entity?
No
Title of funding source
Deputy of research and technology
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
Hamedan University of Medical Sciences
Full name of responsible person
Reza Borzou
Position
Associate Professor
Latest degree
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Other areas of specialty/work
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Person responsible for updating data

Contact

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Full name of responsible person
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Student

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

Informed Consent Form
Undecided - It is not yet known if there will be 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