Clinical Trial Protocol
Iranian Registry of Clinical Trials

08 Nov 2026

The effect of acupressure on chest pain, anxiety and vital signs in the elderly with acute coronary syndrome

Protocol summary

Study aim
Determining the effect of acupressure on chest pain, anxiety and vital signs in elderly patients with acute coronary syndrome

Design
The clinical trial is a randomized double-blind study. The study population will be all elderly people with acute coronary syndrome who refer to the emergency room of Madani Hospital in Khorramabad city. Phase 2 on 110 patients was used for randomization using the rand function of Excel software.

Settings and conduct
When the patient goes to the emergency room and after the triage and visit by the emergency doctor and the diagnosis of acute coronary syndrome, the level of anxiety, pain and vital signs will be measured immediately before the intervention. In the intervention group, the Shen Men (HT7), Shen Men Gusi and Yin Tong points (third eye) will be gently pressed for 5 minutes, and after the intervention, 10, 20 and 30 minutes later, the level of anxiety, pain and vital signs will be measured. will be taken In the control group, it will be done in places other than acupressure points.

Participants/Inclusion and exclusion criteria
Inclusion criteria: age 60 years and older, U/A and NSTEMI patients, pain score 3 to 8, not having diabetes and previous heart attack and exclusion criteria: smoking, alcohol and drug addiction, having mental illness, having anatomical problems in Location of acupressure points

Intervention groups
patients will be randomly divided into intervention and control groups. In the intervention group, acupressure will be performed in three points, and in the control group, the intervention will be performed with the same technique and duration as the intervention group, in points near the acupressure points.

Main outcome variables
Pain, anxiety, systolic and diastolic blood pressure, heart rate and breathing

General information

Reason for update
Acronym
IRCT registration information
IRCT registration number: **IRCT20240723062519N2**
Registration date: **2024-11-12, 1403/08/22**
Registration timing: **registered_while_recruiting**

Last update: **2024-11-12, 1403/08/22**
Update count: **0**

Registration date
2024-11-12, 1403/08/22

Registrant information
Name
Reza Hosseinabadi
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Iran (Islamic Republic of)
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Recruitment status
Recruitment complete
Funding source

Expected recruitment start date
2024-10-22, 1403/08/01
Expected recruitment end date
2025-03-19, 1403/12/29
Actual recruitment start date
empty
Actual recruitment end date
empty
Trial completion date

empty

Scientific title
The effect of acupressure on chest pain, anxiety and vital signs in the elderly with acute coronary syndrome

Public title
The effect of acupressure on acute coronary syndrome

Purpose
Supportive

Inclusion/Exclusion criteria

Inclusion criteria:
Age 60 years and older Willingness to participate in the study Both genders Definitive diagnosis of heart pain by an emergency physician Patient alertness Pain score of 3 and above and 8 and below 8 Patients with unstable angina and without ascending St Not having any wounds on the body Not having a history of heart attack No having a history of diabete Failure of the patient to go to the emergency room by the 115 medical emergency team

Exclusion criteria:
Acute heart attack The patient's loss of consciousness upon entering the emergency room or during the implementation of the intervention Death or unwillingness to continue cooperation for any reason Having a known mental illness such as anxiety Addiction to smoking, alcohol and drugs Having an anatomical problem at the location of acupressure points Having a history of previous heart attack

Age
From **60 years** old

Gender
Both

Phase
N/A

Groups that have been masked

- Participant
- Outcome assessor

Sample size
Target sample size: **110**

Randomization (investigator's opinion)
Randomized

Randomization description
In this study, in order to balance the number of samples allocated to each of the study groups (intervention and placebo groups), block randomization method is used. For this purpose, random blocks of 4 are used to assign patients with acute coronary syndrome to two groups. 6 different combinations of blocks of 4 (AABB- ABAB- ABBA- BBAA- BABA- BAAB) are created and randomly selected using the Blockrand package of R software, and the random sequence is a sequence of letters. A and B will be formed.

Blinding (investigator's opinion)
Double blinded

Blinding description
In this study, the participants will not be informed of being placed in the intervention or placebo group, and the person evaluating the questionnaires will not be aware of which participant is in which group.

Placebo
Not used

Assignment
Factorial

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee
Ethics committee of lorestan University of Medical Sciences

Street address
Lorestan, Kamalvand, Lorestan University of Medical Sciences

City
Khorramabad

Province
Lorestan

Postal code
6813833946

Approval date
2024-01-11, 1402/10/21

Ethics committee reference number
IR.LUMS.REC.1402.321

Health conditions studied

1

Description of health condition studied
Acute coronary syndrome

ICD-10 code

ICD-10 code description

Primary outcomes

1

Description
Pain

Timepoint
Before the intervention, immediately after the intervention, 10 minutes after the intervention, 20 minutes after the intervention, 30 minutes after the intervention

Method of measurement
Numerical pain intensity measurement scale

2

Description
Anxiety

Timepoint
Before the intervention, immediately after the intervention, 10 minutes after the intervention, 20

minutes after the intervention, 30 minutes after the intervention

Method of measurement

DASS-21 stress, anxiety and depression questionnaire, anxiety subscale

3

Description

Vital signs

Timepoint

Before the intervention, immediately after the intervention, 10 minutes after the intervention, 20 minutes after the intervention, 30 minutes after the intervention

Method of measurement

Vital signs chart sheet using bedside monitoring in the emergency department

Secondary outcomes

empty

Intervention groups

1

Description

Intervention group: Gentle pressure for 5 minutes will be applied to the three pressure points of Shen Men, Yin Tong, and HT7 point for the patients.

Category

N/A

2

Description

Control group: In the placebo group, acupressure with the same technique and duration as the intervention group and in places near the acupressure points of the intervention group, where there are no acupressure points according to the expert's opinion, will be performed for the patients.

Category

N/A

Recruitment centers

1

Recruitment center

Name of recruitment center

Shahid Madani Hospital, Khorramabad

Full name of responsible person

Arash Amin

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Sponsors / Funding sources

1

Sponsor

Name of organization / entity

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Full name of responsible person

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Grant name

Grant code / Reference number

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

Yes

Title of funding source

Khoram-Abad 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

Khoram-Abad University of Medical Sciences

Full name of responsible person

Reza Hossein Abadi

Position

Assistant Professor

Latest degree
Ph.D.

Other areas of specialty/work
Nursery

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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
Yes - There is a plan to make this available

Data Dictionary
Yes - There is a plan to make this available

Title and more details about the data/document
In the form of a student thesis file, all information will be available to the Faculty of Nursing and Midwifery of Lorestan University of Medical Sciences and will be available to the public.

When the data will become available and for how long
Immediately after the publication of the thesis

To whom data/document is available
All people who may need the contents of this thesis.

Under which criteria data/document could be used
It does not have any special conditions and will be accessible in the library of Khorramabad Nursing and Midwifery College.

From where data/document is obtainable
Khorramabad Nursing and Midwifery College

What processes are involved for a request to access data/document
Refer to the library of Khorramabad College of Nursing and Midwifery

Comments