Clinical Trial Protocol
Iranian Registry of Clinical Trials

19 Sep 2026

evaluation of acupuncture on the effectiveness of cardiac rehabilitation in blood pressure and heart rate of patients after coronary artery bypass graft(CABG)

Protocol summary

Study aim
Evaluation of acupuncture on the effect of cardiac rehabilitation on blood pressure, heart rate, exercise tolerance in patients after open heart surgery

Design
In this research, 40 eligible patients referring to cardiac rehabilitation Clinic were chosen and were randomly divided into two groups of control and intervention. Group allocation was concealed by assigning a unique code to each participants.

Settings and conduct
Cardiopulmonary rehabilitation Unit of Shahid Faghihi hospital. Researcher is blind about control group.

Participants/Inclusion and exclusion criteria
Patients who underwent Coronary Artery Bypass Graft surgery 6 weeks ago; uncontrolled heart failure

Intervention groups
First group، Acupuncture treatment after cardiac rehabilitation Second group، just cardiac rehabilitation

Main outcome variables
Blood pressure, Heart rate, Borg scale

General information

Reason for update
Error in recording the start date of sample collection

Acronym
توانبخشی قلبی

IRCT registration information
IRCT registration number: **IRCT20171208037793N1**
Registration date: **2019-06-18, 1398/03/28**
Registration timing: **prospective**

Last update: **2022-11-02, 1401/08/11**
Update count: **1**

Registration date
2019-06-18, 1398/03/28

Registrant information

Name
Mohadese zakeri baghestani

Name of organization / entity

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Iran (Islamic Republic of)

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+98 76 3375 5845

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Recruitment status
Recruitment complete

Funding source

Expected recruitment start date
2019-07-23, 1398/05/01

Expected recruitment end date
2020-03-20, 1399/01/01

Actual recruitment start date
2019-07-23, 1398/05/01

Actual recruitment end date
2020-03-20, 1399/01/01

Trial completion date
2020-03-20, 1399/01/01

Scientific title
evaluation of acupuncture on the effectiveness of cardiac rehabilitation in blood pressure and heart rate of patients after coronary artery bypass graft(CABG)

Public title
effect of acupuncture on effectiveness of cardiac rehabilitation

Purpose
Treatment

Inclusion/Exclusion criteria

Inclusion criteria:
Patients who underwent Coronary Artery Bypass Graft since 6 weeks to 3 month ago

Exclusion criteria:
Systolic blood pressure greater than 200 Diastolic blood pressure greater than 110 Acute illness Uncontroled Aarrythmia Uncompensated Heart failure

Age
No age limit

Gender
Both

Phase
3

Groups that have been masked

- Investigator

Sample size
Target sample size: **40**
Actual sample size reached: **34**

Randomization (investigator's opinion)
Randomized

Randomization description
Choosing patients as a case or control with the help of the site: randomization.com

Blinding (investigator's opinion)
Single blinded

Blinding description
The researcher does not have any role in choosing patients as a case or control group

Placebo
Not used

Assignment
Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee
Ethics committee of shiraz university of medical sciences

Street address
Zand Avenue, opposite Palestine Street, Central Building of Shiraz University of Medical Sciences

City
Shiraz

Province
Fars

Postal code
14336 - 71348

Approval date
2018-02-16, 1396/11/27

Ethics committee reference number
IR.SUMS.MED.REC.1396.100

Health conditions studied

1

Description of health condition studied
Coronary Artery Disease

ICD-10 code
I21.0

ICD-10 code description
Ischemic Heart Disease

Primary outcomes

1

Description
Blood pressure

Timepoint
Before the intervention and three weeks after intervention

Method of measurement
Sphygmomanometer

Secondary outcomes

1

Description
Exercise tolerance

Timepoint
Before the intervention and three weeks after intervention

Method of measurement
Borg questionnaire

Intervention groups

1

Description
Intervention group: patients with Coronary Artery Bypass Graft that underwent acupuncture after cardiac rehabilitation(10 sessions, 3 days in week, on determined acupoints with acupuncture needles size 25*25 bong bang factory for 20 minutes)

Category
Rehabilitation

2

Description
Control group: 10 sessions cardiac rehabilitation with treadmill and arm ergometer, 3 days in week

Category
Rehabilitation

Recruitment centers

1

Recruitment center

Name of recruitment center
Shahid faghihi hospital

Full name of responsible person

Sharareh roshanzamir
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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
Shiraz University of Medical Science
Grant code / Reference number
Is the source of funding the same sponsor organization/entity?
Yes
Title of funding source
Shiraz 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
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Person responsible for updating data

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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