Clinical Trial Protocol
Iranian Registry of Clinical Trials

09 Jun 2026

The effect of acupressure on the intestinal function of patients with acute myocardial infarction under primary angioplasty

Protocol summary

Study aim
The determine of effects of acupressure on intestinal function of patients with acute myocardial infarction

Design
Three-group randomized controlled clinical trial

Settings and conduct
The SJ6 - LI4 - ST25- SP6 points of both members are determined symmetrically by the researcher's fingers. Acupressure will be performed twice a day (10am and 6pm) from the beginning of the day for three days.

Participants/Inclusion and exclusion criteria
Acute myocardial infarction, which is confirmed by a laboratory positive blood troponin level and confirmed by a physician. No more than 12 hours of myocardial infarction No chronic constipation based on RomeIV criteria Written and verbal consent to participate in the study Age above 18 Ability to communicate verbally No known mental illness under treatment Absence of ulcers, organ failure, tenderness and fractures in acupressure points Lack of simultaneous participation in other intervention studies no thyroid disease, incurable, neuromuscular, congenital gastrointestinal malformations and renal failure, no gastrointestinal disorders (gastric ulcer, chronic constipation history, fisher, hemorrhoids, prolapse of the rectum, obstruction of the rectum, obstruction) , Biography and physical examination by a physician No dependence or addiction to any drugs

Intervention groups
The SJ6 - LI4 - ST25- SP6 points of both members are determined symmetrically by the researcher's fingers. Acupressure will be performed twice daily (10am and 6pm) from the beginning of the day for three days. Control group: These patients are given nutritional and routine heart disease training. . There is no intervention in this group. Sham group: The sham group offers routine nursing nutrition and care training

Main outcome variables
Improve intestinal function and prevent constipation

General information

Reason for update

Acronym

IRCT registration information
IRCT registration number: **IRCT20110906007494N31**
Registration date: **2020-03-20, 1399/01/01**
Registration timing: **registered_while_recruiting**

Last update: **2020-03-20, 1399/01/01**
Update count: **0**

Registration date
2020-03-20, 1399/01/01

Registrant information

Name
Masoumeh Bagheri Nesami

Name of organization / entity
Mazandaran University of Medical Sciences

Country
Iran (Islamic Republic of)

Phone
+98 11 3336 7551

Email address
mbagheri@mazums.ac.ir

Recruitment status
Recruitment complete

Funding source

Expected recruitment start date
2019-12-22, 1398/10/01

Expected recruitment end date
2020-04-20, 1399/02/01

Actual recruitment start date
empty

Actual recruitment end date
empty

Trial completion date
empty

Scientific title
The effect of acupressure on the intestinal function of patients with acute myocardial infarction under primary angioplasty

Public title
acupressure in cardiac patient
Purpose
Prevention
Inclusion/Exclusion criteria
Inclusion criteria:
Acute myocardial infarction, which is confirmed by a laboratory positive blood troponin level and confirmed by a physician. Written and verbal consent to participate in the study Age over 18 Ability to communicate verbally
Exclusion criteria:
No more than 12 hours of myocardial infarction No chronic constipation based on RomeIV criteria Lack of known mental illnesses under treatment Absence of ulcers, organ failure, tenderness and fractures in acupressure points Lack of simultaneous participation in other intervention studies no thyroid disease, incurable, neuromuscular, congenital gastrointestinal malformations and renal failure, no gastrointestinal disorders (gastric ulcer, chronic constipation history, fisher, hemorrhoids, prolapse of the rectum, obstruction of the rectum, obstruction) , Biography and physical examination by a physician No dependence or addiction to any drug
Age
From **18 years** old
Gender
Both

Phase
N/A
Groups that have been masked
No information
Sample size
Target sample size: **90**
Randomization (investigator's opinion)
Randomized
Randomization description
۴۸۹/۵۰۰۰ Eligible patients were randomly assigned to three groups of 30 acupressure, sham, and control groups using random numbers provided with computer software and Randomization Permuted Block. 15 to 6 blocks so that there are 2 people in each block. Therefore, 90 envelopes are designed and embedded inside based on information obtained from the computer program of letters A of acupressure group, B of sham group and C of control group. Based on the patient's admission date, the priority of opening the envelope is executed on the order of the number.
Blinding (investigator's opinion)
Not blinded
Blinding description
Placebo
Used
Assignment
Parallel
Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee
Name of ethics committee
Ethics Committee of Mazandaran University of Medical Sciences
Street address
Mazandaran University of Medical Sciences, Vice chancellor for research, Moalem street, Moalem square, Sari, Mazandaran, Iran.
City
sari
Province
Mazandaran
Postal code
4816715793
Approval date
2020-01-04, 1398/10/14
Ethics committee reference number
IR.MAZUMS.REC.1398.1256

Health conditions studied

1

Description of health condition studied
myocardial infarction
ICD-10 code
I21.3
ICD-10 code description
ST elevation (STEMI) myocardial infarction of unspecified site

Primary outcomes

1

Description
intestinal function
Timepoint
Before and the first day to 4th day of intervention
Method of measurement
Bristool scale

Secondary outcomes

empty

Intervention groups

1

Description
Intervention group1 : The SJ6 - LI4 - ST25- SP6 points of both members are determined symmetrically by the researcher's fingers. Acupressure will be performed twice

daily (10 am and 6 pm) from the beginning of the day for three days. Point ST25 (Tianshu) is located two fingers away from the navel . The LI4 (Hegu) point lies at the depth of the muscle bundle, resulting from the thumb and forefinger . The SJ6 (Zhigou) dot is located four inches above the transverse line of the wrist between Radius and Ulna . The SP6 (sanyinjiao) point is four fingers above the medial ankle behind the posterior edge of the tibia. Apply acupressure on each spot symmetrically for two minutes. Apply a minute with your thumb pressed vertically, then rest for 5 seconds and then rotate for one minute. A total of 9 minutes of intervention will be administered to the patient each time. Nutrition training and routine nursing care are also provided.

Category

Prevention

2

Description

Intervention group2: The sham group offers routine nursing education and care, and the procedure will be exactly the same as the intervention group, except that pressure is close to the acupressure points according to accredited acupressure specialists in the field, which is about half that. No special timber is applied. The order of the pressure, the type of pressure, the position of the patient, the time and the amount of pressure in the test and sham groups will be the same. The location of the pressure points is similar to that of the intervention group except that they are 1.5 cm apart. It should be noted that in both groups, the pressure procedure will be taught by one person (the researcher). Intestinal function and checklists will then be completed before the intervention and in the first to fourth days.

Category

Placebo

3

Description

Control group: After introducing and expressing the aims of the study and obtaining written informed consent and patient's consent to participate in the study, these patients receive nutritional and routine heart disease training. The demographic and medical information questionnaire, symptom checklist, Rome scale and Bristol are completed. There is no intervention in this group. Intestinal function indicators will be completed before the intervention and in the first to fourth days.

Category

Other

Recruitment centers

1

Recruitment center

Name of recruitment center

Mazandaran Heart Center

Full name of responsible person

Mahsa Kamali

Street address

Imam Sq, Joybar 3way, valiye asr highway, Mazandaran University of Medical Sciences, Sari, Iran

City

sari

Province

Mazandaran

Postal code

۴۸۱۵۷۳۳۹۷۱

Phone

+98 11 3336 1985

Email

kamali2n@gmail.com

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Vice Chancellor for Research Mazandaran University of Medical Sciences

Full name of responsible person

Dr Majid Saeedi

Street address

Mazandaran University of Medical Sciences ,valiye asr highway, Joybar 3way ,Imam Sq,Sari, Mazandaran,Iran

City

sari

Province

Mazandaran

Postal code

48157-33971

Phone

+98 11 3379 5508

Email

kamali2n@gmail.com

Grant name

Grant code / Reference number

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

Yes

Title of funding source

Vice Chancellor for Research Mazandaran 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

2

Sponsor

Name of organization / entity
University researches Assistance
Full name of responsible person
Dr Masoomeh Bagheri Nesami
Street address
Traditional and Comlementary Medicine Research Center, Next to the Tooba Medical Complex, Khazar boulevard, Sari,Mazandaran, Iran
City
Sari
Province
Mazandaran
Postal code
48168-95475
Phone
+98 11 3324 4893
Email
tcmrc.mazums@gmail.com

Grant name

Grant code / Reference number

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

Title of funding source
University researches Assistance

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
Mazandaran University of Medical Sciences
Full name of responsible person
Dr. Masoumeh Bagheri Nasami
Position
PhD of nursing education
Latest degree
Ph.D.
Other areas of specialty/work
Nursery
Street address
Research Assistant of Mazandaran University of Medical Sciences
City
Sari
Province
Mazandaran
Postal code
48157-33971
Phone
+98 11 3379 5508
Email
Mbagheri@mazums.ac.ir

Person responsible for scientific inquiries

Contact
Name of organization / entity
Mazandaran University of Medical Sciences
Full name of responsible person
Dr. Masoumeh Bagheri Nasami
Position
Ph.D. Nursing Education
Latest degree
Ph.D.
Other areas of specialty/work
Nursery
Street address
Research Assistant of Mazandaran University of Medical Sciences
City
Sari
Province
Mazandaran
Postal code
48157-33971
Phone
+98 11 3379 5508
Email
Mbagheri@mazums.ac.ir

Person responsible for updating data

Contact
Name of organization / entity
Mazandaran University of Medical Sciences
Full name of responsible person
Dr. Masoumeh Bagheri Nasami
Position
Ph.D. Nursing Education
Latest degree
Ph.D.
Other areas of specialty/work
Nursery
Street address
Research Assistant of Mazandaran University of Medical Sciences
City
Sari
Province
Mazandaran
Postal code
48157-33971
Phone
+98 11 3379 5508
Email
Mbagheri@mazums.ac.ir

Sharing plan

Deidentified Individual Participant Data Set (IPD)
No - There is not a plan to make this available

Justification/reason for indecision/not sharing IPD

No decision yet

Study Protocol

No - There is not a plan to make this available

Statistical Analysis Plan

No - There is not a plan to make this available

Informed Consent Form

No - There is not a plan to make this available

Clinical Study Report

No - There is not a plan to make this available

Analytic Code

No - There is not a plan to make this available

Data Dictionary

No - There is not a plan to make this available