

Clinical Trial Protocol

Iranian Registry of Clinical Trials

10 Jun 2026

the effect of classic chest massage therapy on pain following midsternotomy in the patients undergoing elective off-pump coronary artery bypass graft

Protocol summary

Summary

objectives: To explore the effect of massage therapy on pain following midsternotomy in the patients after off-pump coronary artery bypass grafting surgery. Study design: A double-blind randomized clinical trial, Methods: (a) participants: inclusion criteria:all patients undergoing elective coronary artery bypass graft in the Afshar cardiovascular research center of Yazd (50 patients); exclusion criteria: patients with chest pain caused by trauma; patients with a previous history of cardiac surgery; patients with chronic pain syndrome; patients with prolonged bleeding during hospital stay (more than 200 cc per hour); patients who had psychiatric disorders; patients who didn't want to continue participating in the study. sample size (50= intervention group: 25, control group:25), (b) intervention: in this study, the control group receive usual medications and cares without any additional intervention; but in intervention group: Four sessions of chest massage therapy by physiotherapist in the days 2 to 5 after surgery (before discharging patients from the hospital) and 12 sessions of massage therapy,three times a week, at the one-month follow-up (every session lasted for 15 minutes)- chest massage therapy techniques: (positioning and postural drainage, chest tapotement techniques, breathing exercises (diaphragmatic breathing, segmental breathing, local expansion, and pursed lip breathing),thorax mobilization exercises. (c) intervention time:the days 2 to 5 after surgery before discharging patients and one-month follow-up. (d) results: in this study pain is the primary outcome; quality of life, anxiety and hospital stay are the secondary outcomes.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT2016010925913N1**

Registration date: **2016-02-07, 1394/11/18**

Registration timing: **prospective**

Last update:

Update count: **0**

Registration date

2016-02-07, 1394/11/18

Registrant information

Name

Mohammad Zolfaghari

Name of organization / entity

Shahid Sadoughi University of Medical Sciences

Country

Iran (Islamic Republic of)

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Recruitment status

Recruitment complete

Funding source

Afshar cardiovascular research center of Yazd (affiliated with Shahid Sadoughi University of Medical Sciences and Health Services) will pay all costs of the survey.

Expected recruitment start date

2016-03-05, 1394/12/15

Expected recruitment end date

2016-04-03, 1395/01/15

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

the effect of classic chest massage therapy on pain following midsternotomy in the patients undergoing elective off-pump coronary artery bypass graft

Public title

the effect of classic chest massage therapy on pain in patients undergoing elective coronary artery bypass graft

Purpose

Supportive

Inclusion/Exclusion criteria

inclusion criteria:all patients undergoing elective coronary artery bypass graft in the Afshar cardiovascular research center of Yazd (50 patients); exclusion criteria: patients with chest pain caused by trauma; patients with a previous history of cardiac surgery; patients with chronic pain syndrome; patients with prolonged bleeding during hospital stay (more than 200 cc per hour); patients who had psychiatric disorders; patients who didn't want to continue participating in the study.

Age

No age limit

Gender

Both

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: 50

Randomization (investigator's opinion)

Randomized

Randomization description**Blinding (investigator's opinion)**

Double blinded

Blinding description**Placebo**

Not used

Assignment

Parallel

Other design features**Secondary Ids**

empty

Ethics committees**1****Ethics committee****Name of ethics committee**

Afshar Cardiovascular Research Center affiliated with Shahid Sadoughi University of Medical Sciences

Street address

Afshar Cardiovascular Research Center, Jomhoori Blvd, Yazd, Iran

City

Yazd

Postal code**Approval date**

2012-06-26, 1391/04/06

Ethics committee reference number

746/ت/ق

Health conditions studied**1****Description of health condition studied**

Coronary Artery Bypass Graft

ICD-10 code

T82.2

ICD-10 code description

Mechanical complication of coronary artery bypass and valve grafts

Primary outcomes**1****Description**

Pain

Timepoint

before intervention, the day 5 after intervention, one month after intervention

Method of measurement

using VAS questionnaire

Secondary outcomes**1****Description**

Quality of life

Timepoint

before intervention, the day 5 after intervention, one month after intervention

Method of measurement

using SF-36 questionnaire

2**Description**

Anxiety

Timepoint

before intervention, the day 5 after intervention, one month after intervention

Method of measurement

using VAS questionnaire

3**Description**

Hospital Stay

Timepoint

before discharge

Method of measurement

according to patient's medical record

Intervention groups

1

Description

intervention group: received classic chest physiotherapy
control group: no intervention

Category

Treatment - Other

2

Description

Control group: in this study, the control group receive usual medications and cares Without any additional intervention.

Category

Treatment - Other

Recruitment centers

1

Recruitment center

Name of recruitment center

Afshar Cardiovascular Research Center of Yazd

Full name of responsible person

Dr. Seyed Jalil Mirhosseini

Street address

Afshar Cardiovascular Research Center, Jomhoori Blvd, Yazd, Iran

City

Yazd

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Afshar Cardiovascular Research Center of Yazd

Full name of responsible person

Dr. Soltani- manager of Afshar Cardiovascular Research Center of Yazd

Street address

Afshar Cardiovascular Research Center, Jomhoori Blvd, Yazd, Iran

City

Yazd

Grant name

Grant code / Reference number

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

Yes

Title of funding source

Afshar Cardiovascular Research Center of Yazd

Proportion provided by this source

100

Public or private sector

empty

Domestic or foreign origin

empty

Category of foreign source of funding

empty

Country of origin

Type of organization providing the funding

empty

Person responsible for general inquiries

Contact

Name of organization / entity

Shahid Sadoughi University of Medical Sciences and Health Services

Full name of responsible person

Mohammad Zolfaghari

Position

Medical Student

Other areas of specialty/work

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Web page address**Sharing plan****Deidentified Individual Participant Data Set (IPD)**

empty

Study Protocol

empty

Statistical Analysis Plan

empty

Informed Consent Form

empty

Clinical Study Report

empty

Analytic Code

empty

Data Dictionary

empty