Clinical Trial Protocol
Iranian Registry of Clinical Trials

22 Nov 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

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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/ق/ت

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 Cardiovacular Research Center of Yazd
Full name of responsible person
Dr. Seyed Jalil Mirhosseini
Street address
Afshar Cardiovascular Research Center, Jomhoori Blvd, Yazd, Iran
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Yazd

Sponsors / Funding sources

1

Sponsor
Name of organization / entity
Afshar Cardiovascular Reaserch Center of Yazd
Full name of responsible person
Dr. Soltani- manager of Afshar Cardovascular Reaserch 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 Reaserch 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

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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