Clinical Trial Protocol
Iranian Registry of Clinical Trials

17 Sep 2026

The effect of local heat therapy in the posterior of chest on chest paincardiovascular function in patients with acute coronary syndrome

Protocol summary

Summary

The aim of this study is to investigate the effects of chest local heat therapy in the posterior of chest on chest pain and cardiovascular function in patients with acute coronary syndrome. Inclusion criteria are the existence of absolute diagnosis of acute coronary syndrome by the specialist physician and having a stable physiological condition for answering to the questions. Exclusion criterion is any type of clinical condition that requires a special diagnosis and treatment that makes local heat therapy impossible for the patient. In this study, we randomly will be allocated 50 patients with acute coronary syndrome to either the placebo or the experimental groups. Patients in the experimental and the placebo groups will be received local heat therapy in the posterior of chest using a hot pack warmed to 50 and 37 °C, respectively. Local heat therapy will be administered for four 23-minute sessions in two subsequent days. We will be assessed chest pain intensity, duration and frequency as well as the need for opioid analgesic therapy both before and after the study.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT2015081312878N2**
Registration date: **2015-09-16, 1394/06/25**
Registration timing: **registered_while_recruiting**

Last update:
Update count: **0**

Registration date

2015-09-16, 1394/06/25

Registrant information

Name

Batol Mohammadian

Name of organization / entity

Gonabad University of Medical Sciences

Country

Iran (Islamic Republic of)

Phone

+98 53 3725 4435

Email address

mohammadian.b@gmu.ac.ir

Recruitment status

Recruitment complete

Funding source

Gonabad University of Medical Science

Expected recruitment start date

2015-08-26, 1394/06/04

Expected recruitment end date

2016-02-20, 1394/12/01

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

The effect of local heat therapy in the posterior of chest on chest paincardiovascular function in patients with acute coronary syndrome

Public title

The effect of local heat therapy on chest pain

Purpose

Supportive

Inclusion/Exclusion criteria

Inclusion criteria: The existence of absolute diagnosis of acute coronary syndrome by the specialist physician, having a stable physiological condition for answering to questions, age range from 18 to 100, non addiction to alcohol and narcotics, having no diabetic or muscloskeletal disease of chest or digestive diseases at the time of the disease, no existence of inflammation,

wound, scratching and redness in the area of chest. Exclusion criteria: Lock of tendency to participate in the study, worsening the patients condition and lack of a stable condition for answering the questions and every type of clinical condition that requires a special diagnosis and treatment that local heat therapy for the patient be impossible.

Age
From **18 years** old to **100 years** old

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)
Not blinded

Blinding description

Placebo
Used

Assignment
Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee
Gonabad University of Medical Sciences

Street address
Gonabad University of Medical Sciences, Next to the Asian Road, Gonabad, Iran

City
Gonabad

Postal code

Approval date
2014-10-22, 1393/07/30

Ethics committee reference number
GMU.REC.1393.75

Health conditions studied

1

Description of health condition studied
Acute coronary syndrom

ICD-10 code
I20-I25

ICD-10 code description
Ischaemic heart diseases

Primary outcomes

1

Description
Chest pain

Timepoint
Befor and after intervention

Method of measurement
McGill Pain Questionnaire

Secondary outcomes

1

Description
Heart rate

Timepoint
Befor and after intervention

Method of measurement
Heart rate (beats/min) will be measured with cardiac monitor

2

Description
Systolic BP

Timepoint
Befor and after intervention

Method of measurement
Systolic pressure (mmhg) will be measured with cardiac monitor

3

Description
Diastolic BP

Timepoint
Befor and after intervention

Method of measurement
Diastolic pressure (mmhg) will be measured with cardiac monitor

4

Description
O2saturation

Timepoint
Befor and after intervention

Method of measurement
Pulse oximetry

Intervention groups

1

Description
Patients in the experimental groups will be received local heat therapy in the posterior of chest using a hot pack warmed to 50°C

Category
Other

2

Description
Patients in the placebo groups will be received local heat therapy in the posterior of chest using a hot pack warmed 37 °C
Category
Other

Recruitment centers

1

Recruitment center
Name of recruitment center
22 Bahman Hospital in Gonabad
Full name of responsible person
D.r Mahmoud Reza Nematolahi
Street address
22 Bahman Hospital, Naser Khosro Street, Gonabad, Iran
City
Gonabad

Sponsors / Funding sources

1

Sponsor
Name of organization / entity
Gonabad University of Medical Science
Full name of responsible person
Ali Mohammadpour
Street address
Gonabad University of Medical Sciences, Next to the Asian Road, Gonabad, Iran
City
Gonabad
Grant name
Grant code / Reference number
Is the source of funding the same sponsor organization/entity?
Yes
Title of funding source
Gonabad University of Medical Science
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
Gonabad University of Medical Science
Full name of responsible person
Batol Mohammadian
Position
Master of Nursing Education
Other areas of specialty/work
Street address
Gonabad University of Medical Sciences, Next to the Asian Road, Gonabad, Iran
City
Gonabad
Postal code
Phone
+98 51 5722 3028
Fax
Email
mohammadian.b@gmu.ac.ir
Web page address

Person responsible for scientific inquiries

Contact
Name of organization / entity
Gonabad University of Medical Science
Full name of responsible person
Ali Mohammadpour
Position
PhD In Nursing
Other areas of specialty/work
Street address
Gonabad University of Medical Sciences, Next to the Asian Road, Gonabad, Iran
City
Gonabad
Postal code
Phone
+98 51 5722 3028
Fax
Email
amohmmadpur@yahoo.com
Web page address

Person responsible for updating data

Contact
Name of organization / entity
Gonabad University of Medical Science
Full name of responsible person
Batol Mohammadian
Position
Master of Nursing Education
Other areas of specialty/work
Street address
Gonabad University of Medical Sciences, Next to the Asian Road, Gonabad, Iran
City
Gonabad
Postal code
Phone
+98 51 5722 3028
Fax
Email

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