

Clinical Trial Protocol

Iranian Registry of Clinical Trials

17 Sep 2026

Cryotherapy of pain compared to Acupressure and drainage chest tube removal in the Elderly

Protocol summary

Summary

This clinical trial is a quasi-experimental pre-test - post-test, in which to evaluate the effectiveness of Acupressure and Cryotherapy of pain in elderly people leaving hospital chest drainage tube will be Martyr Rajai Alborz. Samples were selected based on research and then explain the nature of the research and obtaining written consent from the samples will be carried out. The samples were randomly selected according to extraction by patients of the bag. A sample size of 150 is considered. The degree of pain in each group before the intervention by the VAS assessment of pain (VAS) to be measured. Then, immediately after and 30 minutes after the departure of chest tube drainage of these tools will be used to measure pain. The Acupressure at Hugo (LI4) Pressure a person will be trained. Hugo point (LI4: Back of the hand second metacarpal bone 1 and 2 and the radial pressure is 4 seconds and 2 seconds of rest in bilateral and this will be repeated 10 times per minute. Acupressure treatment for 30 minutes (20 minutes before to 10 minutes after extubation) will apply. Cryotherapy group of 3 closed cooling gel for 20 minutes around the chest tube drainage (pre-extubation) will be used and The control group will receive only routine care. Inclusion criteria: having no cognitive impairment and psychiatric using AMT, Having a chest tube into the pleural area, No allergy to the cold in Cryotherapy. Non sedatives 12 hours before the intervention. Having a BMI in the normal range, The lack of any scarring and deformity at LI4, Lack of housing for 4 hours before the intervention, Lack of serious illness, exclusion criteria included: Patients connected to a mechanical ventilator. Sudden change in the patient's condition during the intervention (such as Angina).

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT2015070623100N1**

Registration date: **2015-08-31, 1394/06/09**

Registration timing: **registered_while_recruiting**

Last update:

Update count: **0**

Registration date

2015-08-31, 1394/06/09

Registrant information

Name

Sakineh Hajizadeh

Name of organization / entity

Iran University of Medical Sciences

Country

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Recruitment status

Recruitment complete

Funding source

Iran University of Medical Sciences

Expected recruitment start date

2015-08-23, 1394/06/01

Expected recruitment end date

2015-10-23, 1394/08/01

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Cryotherapy of pain compared to Acupressure and drainage chest tube removal in the Elderly

Public title

Efficacy of Acupressure and Cryotherapy on Pain relief

Purpose

Supportive

Inclusion/Exclusion criteria

Inclusion criteria: Lack of cognitive and mental disorders using AMT and earn a minimum score of 7 : Having a chest tube into the pleural area after open heart surgery! Cryotherapy in the group of patients who do not have allergy to the cold! The intervention did not receive sedation 12 hours before! BMI is normal! The lack of any scratches! scars and disfigurement at LI4! Lack of housing for 4 hours before the intervention! Lack of serious diseases such as diabetes! neuropathy and disorders such as Raynaud disease and burger! Exclusion criteria: patients connected to mechanical ventilation! Patients with severe visual impairment! severe hearing loss patients! Sudden change in the patient's condition during the intervention and pain in other parts of the pain at the site of drainage pipes to affect (such as angina)! Patients who do not contribute to the end of intervention.

Age

From **60 years** old

Gender

Both

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: **150**

Randomization (investigator's opinion)

N/A

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

Single blinded

Blinding description**Placebo**

Not used

Assignment

Parallel

Other design features**Secondary Ids**

empty

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

Ethics Committee of Iran University of Medical Sciences

Street address

Floor 5, Headquarters,Iran University of Medical Sciences, Between Sheikh Fazlollah & Chamran, Hemat Express way

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Tehran

Postal code

1449614535

Approval date

2015-08-05, 1394/05/14

Ethics committee reference number

IR.IUMS.REC.1394.9311580004

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

Pain

ICD-10 code

R52, R52.0

ICD-10 code description

Pain, not elsewhere classified, Acute pain

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

Pain

Timepoint

20 minutes before,Immediately and 15 minutes after intervention

Method of measurement

Visual Analog Scale (VAS)

Secondary outcomes

empty

Intervention groups**1****Description**

Cryotherapy in cooling gel for 20 minutes before leaving drainage chest tubes will be placed. The study of cold gel cooling through 3 depending on size cm 10 x8 around drainage pipes will be used. Acupressure intervention in the 4 seconds and 2 seconds Hugo pressure at rest is considered This process will be repeated 10 times per minute. This will be done bilaterally to 30 minutes. When verifying the authenticity of the client at that point feeling of warmth, heaviness, swelling, or is numb. Push both hands simultaneously in 20 minutes to 10 minutes before leaving drainage tube drainage tube will be done immediately.

Category

Other

2**Description**

In the control group only standard routine care after open heart surgery will be done.

Category

Other

Recruitment centers

1

Recruitment center

Name of recruitment center

Martyr Rajai Hospital Alborz

Full name of responsible person

Sakine Hajizadeh-Geriatric Nursing Graduate Student

Street address

Martyr Rajai Hospital, Martyr Rajai ST, Martyr Beheshti ST, Alborz

City

Karaj

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Depty Research of Iran University of Medical Sciences

Full name of responsible person

Motavallian Doctor

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Floor 5, Center Chief, Iran University of Medical Sciences, Between Chmran & Sheikh Fazlollah, Hemat Highway

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Grant name**Grant code / Reference number****Is the source of funding the same sponsor organization/entity?**

Yes

Title of funding source

Depty Research of Iran University of Medical Sciences

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

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Position

Nursing Ph.D.

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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