

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

03 Jul 2026

### Determination the severity (rate) of pain after closing thoracotomy incision by intracostal sutures and pericostal sutures

#### Protocol summary

##### Summary

This study aims to investigate severity( rate) of pain after thoracotomy with two different surgical techniques and is performed on 134 patients with thoracotomy indication in 2015. Patients are randomized into two groups using sealed envelopes. The first 67 patients are their chests closed with pericostal sutures (stitches are placed on top of the fifth rib and on top of the seventh rib), and the next 67 patients are their chest closed with intracostal sutures (stitches will place on top of the fifth rib and through the small holes drilled in the bed of the sixth rib). Pain severity after thoracotomy is evaluated by numeric pain rating scale during 3 days after surgery.

#### General information

##### Acronym

##### IRCT registration information

IRCT registration number: **IRCT2015080323480N1**  
Registration date: **2016-02-09, 1394/11/20**  
Registration timing: **prospective**

Last update:

Update count: **0**

##### Registration date

2016-02-09, 1394/11/20

##### Registrant information

##### Name

mohsen eshraghi

##### Name of organization / entity

Qom University of Medical Sciences

##### Country

Iran (Islamic Republic of)

##### Phone

+98 912 759 9489

##### Email address

meshraghi@muq.ac.ir

##### Recruitment status

**Recruitment complete**

##### Funding source

Vice Chancellor for research of Qom University of Medical Sciences

##### Expected recruitment start date

2016-02-20, 1394/12/01

##### Expected recruitment end date

2016-09-22, 1395/07/01

##### Actual recruitment start date

empty

##### Actual recruitment end date

empty

##### Trial completion date

empty

##### Scientific title

Determination the severity (rate) of pain after closing thoracotomy incision by intracostal sutures and pericostal sutures

##### Public title

Two different surgical techniques to close thoracotomy incision to decrease the pain after surgery

##### Purpose

Prevention

##### Inclusion/Exclusion criteria

Inclusion criteria: patients with thoracotomy indication. The exclusion criteria: patients younger than 19 years and older than 100 years; chronic pain; long-term use of nonsteroidal anti-inflammatory drugs (NSAIDs) or analgesics; psychiatric illness; cancer invasion into the chest wall; preoperative chest radiation or chemotherapy; previous ipsilateral thoracotomy; neurological diseases such as diabetes-related neuropathy; a history of a previous ipsilateral thoracotomy; rib fracture during surgery; incision infection or empyema; loss of consciousness; mechanical ventilator assistance; pulmonary embolism; reoperation and Patients unwillingness to continue the trial.

## Age

From **19 years** old to **100 years** old

## Gender

Both

## Phase

3

## Groups that have been masked

*No information*

## Sample size

Target sample size: **134**

## Randomization (investigator's opinion)

Randomized

## Randomization description

## Blinding (investigator's opinion)

Double blinded

## Blinding description

## Placebo

Not used

## Assignment

Parallel

## Other design features

Closed envelopes

## Secondary Ids

empty

## Ethics committees

### 1

#### Ethics committee

##### Name of ethics committee

Ethics committee of Qom University of Medical Sciences

##### Street address

Qom University of Medical Sciences, Saheli Street

##### City

Qom

##### Postal code

#### Approval date

2015-02-04, 1393/11/15

#### Ethics committee reference number

ir.muq.rec.1393.100

## Health conditions studied

### 1

#### Description of health condition studied

injury of intercostal nerves

#### ICD-10 code

S24.5

#### ICD-10 code description

injury of other nerves of thorax

## Primary outcomes

### 1

#### Description

pain

#### Timepoint

3 days after surgery

#### Method of measurement

numeric pain rating score

## Secondary outcomes

### 1

#### Description

Air lea; hemorrhage; pneumonia; emboli and DVT; empyema; wound infection; atelectasis.

#### Timepoint

every day after surgery

#### Method of measurement

physical examination and history taking; CXRay

## Intervention groups

### 1

#### Description

Intervention group 1: patients are their chests closed with pericostal sutures (stitches are placed on top of the fifth rib and on top of the seventh rib).

#### Category

Prevention

### 2

#### Description

Intervention group 2: patients are their chest closed with intracostal sutures (stitches will place on top of the fifth rib and through the small holes drilled in the bed of the sixth rib).

#### Category

Prevention

## Recruitment centers

### 1

#### Recruitment center

##### Name of recruitment center

Shahid Beheshti Hospital

##### Full name of responsible person

Mohsen Eshraghi

##### Street address

Shahid Beheshti Hospital, Shahid Beheshti Blvd

##### City

Qom

## Sponsors / Funding sources

### 1

#### Sponsor

##### Name of organization / entity

Vice Chancellor for research of Qom University of Medical Sciences

**Full name of responsible person**

Hossein Saghafi

**Street address**

Shahid Beheshti Hospital, Shahid Beheshti Blvd

**City**

Qom

**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 of Qom 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**

Qom University of Medical Sciences

**Full name of responsible person**

Mohammad Hossein Ghasem Begloo

**Position**

Medical student

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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*