Clinical Trial Protocol
Iranian Registry of Clinical Trials

22 Nov 2026

Comparison study of continuous serratous anterior plane block and thoracic epidural block in post thoracotomy analgesia

Protocol summary

Study aim
Comparison study of continuous serratous anterior plane block and thoracic epidural block in post thoracotomy analgesia

Design
Clinical trial with intervention and control groups,40 patients sample size, Trial phase 2-3.Simple randomization based on random numbers table.

Settings and conduct
40 participants who meet inclusion criteria among candidates referred to the Masih Daneshvari hospital in 2019 were divided to continuous anterior serratus block or epidural thoracic continuous block.

Participants/Inclusion and exclusion criteria
Inclusion criteria: Patients candidate for continuous anterior serratus block / persistent thoracic epidural block; Age 18 and above; Patients with satisfaction to participate in the study Exclusion criteria: Contraindication of any continuous anterior / epidural thoracic continuous block; Chronic thoracic pain; Drug and Alcohol Abuse; Coagulopathy; Patients dissatisfied with participation in the study

Intervention groups
Intervention group: The ultrasound probe is placed in the midclavicular region of the chest at the sagittal surface. After determining the fifth midaxillary rib, the needle is inserted to a depth of 1–2 cm. After fixation of the epidural catheter in the anterior of the serratus muscle, first 10 ml of 0.25% marcain is injected and then 5 ml of solution contains 0.1% marcine is infused. Control group: The epidural catheter is fixed in the T7-8 space. The injectable drugs are similar to the intervention group.

Main outcome variables
Pain Level

General information

Reason for update

Acronym

IRCT registration information
IRCT registration number: **IRCT20131124015515N9**
Registration date: **2019-10-27, 1398/08/05**
Registration timing: **registered_while_recruiting**

Last update: **2019-10-27, 1398/08/05**
Update count: **0**

Registration date
2019-10-27, 1398/08/05

Registrant information

Name
Masoud Hashemi

Name of organization / entity
Shahid Beheshti University of Medical Sciences

Country
Iran (Islamic Republic of)

Phone
+98 21 2261 2252

Email address
dr.hashemi@sbmu.ac.ir

Recruitment status
Recruitment complete

Funding source

Expected recruitment start date
2019-10-21, 1398/07/29

Expected recruitment end date
2019-12-20, 1398/09/29

Actual recruitment start date
empty

Actual recruitment end date
empty

Trial completion date
empty

Scientific title
Comparison study of continuous serratous anterior plane block and thoracic epidural block in post thoracotomy analgesia

Public title
Comparison of postoperative thoracotomy analgesia with continuous serratus block and epidural thoracic block
Purpose
Treatment
Inclusion/Exclusion criteria
Inclusion criteria:
Age 18 and above Patients candidate for continuous anterior serratus block / persistent thoracic epidural block Patients with satisfaction to participate in the study
Exclusion criteria:
Contraindication of any continuous anterior / epidural thoracic continuous block Chronic thoracic pain Drug and Alcohol Abuse Coagulopathy Patients dissatisfied with participation in the study
Age
From **18 years** old
Gender
Both

Phase
2-3
Groups that have been masked
No information
Sample size
Target sample size: **40**
Randomization (investigator's opinion)
Randomized
Randomization description
Simple randomization based on random numbers table. In this way, we put a set of numbers in a completely random order without any pattern or order, set the table numbers to read from above. For intervention group we consider even numbers and for control group we consider individual numbers. Then we place one of the numbers up and down, register the number and assign it to one of the intervention or control groups.
Blinding (investigator's opinion)
Not 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 Shahid Beheshti University of Medical Sciences
Street address
Tabnak St.,Tehran, Tehran, Iran, Islamic Republic Of
City
Tehran
Province
Tehran
Postal code
1985717443
Approval date
2017-10-27, 1396/08/05
Ethics committee reference number
IR.SBMU.RETECH.REC.1396.844

Health conditions studied

1

Description of health condition studied
Post thoracotomy pain
ICD-10 code
G89.12
ICD-10 code description
Acute post-thoracotomy pain

Primary outcomes

1

Description
Pain level
Timepoint
2, 4, 6, 8, 24 and 48 hours after block
Method of measurement
Visual analog scale (VAS) (0 None; 1-3 Mild; 4-7 Moderate; 8-10 Severe)

Secondary outcomes

empty

Intervention groups

1

Description
Intervention group: The ultrasound probe is placed in the midclavicular region of the chest at the sagittal surface. After determining the fifth midaxillary rib, the needle is inserted to a depth of 1–2 cm. After fixation of the epidural catheter in the anterior of the serratus muscle, first 10 ml of 0.25% marcain is injected and then 5 ml of solution contains 0.1% marcine is infused.
Category
Treatment - Devices

2

Description
Control group: The epidural catheter is placed in the T7-8 space. The injectable drugs are similar to the intervention group.
Category
Treatment - Devices

Recruitment centers

1

Recruitment center

Name of recruitment center
Masih Daneshvari hospital

Full name of responsible person
Masoud Hashemi MD

Street address
Darabad, Shahid Bahonar (Niavaran) Street

City
Tehran

Province
Tehran

Postal code
19556

Phone
+98 21 2712 3000

Email
dr.hashemi@sbmu.ac.ir

Sponsors / Funding sources

1

Sponsor

Name of organization / entity
Shahid Beheshti University of Medical Sciences

Full name of responsible person
Afshin Zarghi MD.

Street address
Shahid Arabi st., Yaman St., Shahid Chamran Expressway

City
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Tehran

Postal code
1985717443

Phone
+98 21 2243 9781

Email
zarghi@sbmu.ac.ir

Grant name

Grant code / Reference number

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

Title of funding source
Shahid Beheshti University of Medical Sciences

Proportion provided by this source
100

Public or private sector
Public

Domestic or foreign origin
Domestic

Category of foreign source of funding
empty

Country of origin

Type of organization providing the funding
Academic

Person responsible for general inquiries

Contact

Name of organization / entity
Shahid Beheshti University of Medical Sciences

Full name of responsible person
Masoud Hashemi MD.

Position
Associate Professor

Latest degree
Subspecialist

Other areas of specialty/work
Anesthesiology

Street address
Akhtar hospital, Sharifi Manesh st.

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1964714953

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Person responsible for scientific inquiries

Contact

Name of organization / entity
Shahid Beheshti University of Medical Sciences

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Masoud Hashemi MD.

Position
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Person responsible for updating data

Contact

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Sharing plan

Deidentified Individual Participant Data Set (IPD)
Yes - There is a plan to make this available
Study Protocol
Yes - There is a plan to make this available
Statistical Analysis Plan
Yes - There is a plan to make this available
Informed Consent Form
Yes - There is a plan to make this available
Clinical Study Report
Yes - There is a plan to make this available
Analytic Code
Yes - There is a plan to make this available
Data Dictionary
Yes - There is a plan to make this available
Title and more details about the data/document
The whole data can be shared after unidentifiable people.
When the data will become available and for how long
Start the access period 6 months after printing the results
To whom data/document is available
Only available to scholars working in academic and academic institutions
Under which criteria data/document could be used
Employed in research centers
From where data/document is obtainable
Person responsible for scientific inquiries
What processes are involved for a request to access data/document
Send email to person responsible for scientific inquiries
Comments