Clinical Trial Protocol
Iranian Registry of Clinical Trials

22 Nov 2026

Clinical trial of Comparison of effectiveness of stellate ganglion block under the guidance of fluoroscopy and ultrasonography guidance in upper extremity complex regional pain syndrome

Protocol summary

Summary

In this study 14 patients with sympathetic complex regional pain syndrome in upper extremities who were visited in pain clinic were included. Patients in a randomized method with block randomization divided in two groups (with sonograpgy or fluoroscopic guidance). The purpose of the study is the pain relieve and rise the temperature in the affected limb. Fourteen patients with upper extremities sympathetic maintain pain were candidates for Stellate ganglion block with block randomization divided in two 7 patients groups . First group will be blocked under fluoroscopic guidance and second group will be blocked under ultrasound guidance. Inclusion criteria: Type 1 and Type 2 CRPS, post-herpetic neuralgia, head and neck and upper limbs cancer pain . Exclusion criteria: anticoagulant therapy, pneumothorax or pneumonectomy in other side, recent MI . The final aims after stellate ganglion block is VAS<3 during minimal daily activities .

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT2012081410599N1**
Registration date: **2015-01-30, 1393/11/10**
Registration timing: **registered_while_recruiting**

Last update:
Update count: **0**

Registration date

2015-01-30, 1393/11/10

Registrant information

Name

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Name of organization / entity

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Recruitment status

Recruitment complete

Funding source

Vice chancellor for research , Iran University of Medical Sciences

Expected recruitment start date

2014-09-23, 1393/07/01

Expected recruitment end date

2015-03-20, 1393/12/29

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Clinical trial of Comparison of effectiveness of stellate ganglion block under the guidance of fluoroscopy and ultrasonography guidance in upper extremity complex regional pain syndrome

Public title

Upper extremity pain management with stellate ganglion block

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria: Type1 and 2 CRPS, post-herpetic neuralgia, head and neck and upper limbs cancer pain, vascular pain, hyperhydrosis, vascular vasospasm,

vasculopathy related Menier disease, post traumatic syndromes which cause cyanosis, cold hydrosis and inflammation. Exclusion criteria : anticoagulant therapy, pneumothorax or pneumonectomy in other side, recent MI, glaucoma and cardiac conduction anomaly.

Age
No age limit

Gender
Both

Phase
0

Groups that have been masked
No information

Sample size
Target sample size: **14**

Randomization (investigator's opinion)
Randomized

Randomization description

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 Iran University of Medical Sciences.

Street address
Vice chancellor for research, Iran University of Medical Sciences, beside Milad Tower, Hemat exp way

City
Tehran

Postal code

Approval date
2014-07-23, 1393/05/01

Ethics committee reference number
93-02-30-24632-103514

2

Ethics committee

Name of ethics committee

Street address

City

Postal code

Approval date
2010-09-23, 1389/07/01

Ethics committee reference number

Health conditions studied

1

Description of health condition studied
Upper Extremities Complex regional pain syndrome

ICD-10 code
M79.6

ICD-10 code description
Pain in limb

Primary outcomes

1

Description
Pain

Timepoint
First , 6 hours and 2-7 days after that

Method of measurement
VAS (standard tools for pain assessment)

2

Description
Affected upper extremity temperature

Timepoint
First , 6 hours and 2-7 days after that

Method of measurement
Thermometer

Secondary outcomes

1

Description
Conjunctival and nasal congestion

Timepoint
Immediately after injection

Method of measurement
Visual

Intervention groups

1

Description
Flouroscopic guide stellate ganglion block: After select the patient with block randomization method, first put the C-ARM in AP view and specify the C6 or C7 vertebra. The desired location is the junction between the transverse process and the body of C6 or C7 vertebra. Five to 10 cm Needle plug to the extension tube while contact bone occurred. The needle will be positioned at anterolateral to the vertebral body. Longus colli located at lateral to vertebral body and medial to transverse process. Be aware that needle be in contact with the bone to avoid the longus colli injection. If paresthesia will occurred the needle withdrawn and repositioned in another place.

Category

Treatment - Other

2

Description
Sono guide stellate ganglion block: After select the patient with block randomization method,the patient is placed in supine position with little head extension to contralateral side . We used the linear high frequency transducer (6-13 mhz) at C6 cervical vertebra. we must see the cutting of the anatomical structures such as the C6 transverse process, longus colli muscle, prevertebral fascia, thyroid gland and carotid artery . The needle might be the path lateral to the carotid artery and is the preferred path.

Category
Treatment - Other

Recruitment centers

1

Recruitment center

Name of recruitment center
Rasool Akram Hospital

Full name of responsible person
Poupak Rahim Zadeh

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Department of pain، 4th Floor, Hazrat-E-Rasool Hospital, Iran University of Medical Sciences, Niayesh “St.”,Sattarkahn “Ave.”, Tehran, Iran

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Sponsors / Funding sources

1

Sponsor

Name of organization / entity
Vice chancellor for research, Iran University of Medical Sciences

Full name of responsible person
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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
Vice chancellor for research, 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
Iran University of Medical Sciences

Full name of responsible person
karim Hemati

Position
Second administrator-Associated professor of Anesthesiology, Pain Fellowship

Other areas of specialty/work

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Person responsible for scientific 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