

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

12 Sep 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 sonography 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

Poupak Rahimzadeh

**Name of organization / entity**

Iran University of Medical Sciences

##### Country

Iran (Islamic Republic of)

##### Phone

+98 21 6650 9059

##### Email address

p-rahimzadeh@tums.ac.ir

##### 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

##### Street address

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

##### City

Tehran

## Sponsors / Funding sources

### 1

#### Sponsor

##### Name of organization / entity

Vice chancellor for research, Iran University of Medical Sciences

##### Full name of responsible person

Ali javad Mousavi

##### Street address

Vice chancellor for research, Iran University of Medical Sciences, beside Milad Tower, Hemat "Exp." way

##### City

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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

#### Contact

##### Name of organization / entity

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##### Full name of responsible person

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##### Position

Assistant professor of Anesthesiology - Pain Fellowship

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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*