

Clinical Trial Protocol

Iranian Registry of Clinical Trials

29 Jun 2026

Effectiveness of continuous brachial plexus block at axillary level in preventing CRPS after distal radius fracture surgeries: a RCT

Protocol summary

Summary

This study is a blinded randomized control trial. 50 patients between 18 and 70 age old with distal radius fracture are included. After dividing them randomly in two groups, during the first 6 hours of admission, the intervention group will be blocked by an anesthesiologist. In favor of making a continuous block lasting for 48 hours, a pump will be attached to the end of the catheter. This pump will infuse the anesthetic drug continuously. The control group will not undergo any block. Both groups will be visited on 24hr, 72 hr, first week, months 1, 2 and 6 for pain assessment and evaluating complex regional pain syndrome. CRPS will be diagnosed based on IASP criteria and data will be analyzed by SPSS18.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT201110267919N1**

Registration date: **2011-11-24, 1390/09/03**

Registration timing: **prospective**

Last update:

Update count: **0**

Registration date

2011-11-24, 1390/09/03

Registrant information

Name

Sadegh Saberi

Name of organization / entity

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Recruitment status

Recruitment complete

Funding source

Tehran University of Medical Sciences

Expected recruitment start date

2011-12-22, 1390/10/01

Expected recruitment end date

2012-06-21, 1391/04/01

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Effectiveness of continuous brachial plexus block at axillary level in preventing CRPS after distal radius fracture surgeries: a RCT

Public title

Effectiveness of nerve block in preventing complex regional pain syndrome after radius fracture surgeries

Purpose

Prevention

Inclusion/Exclusion criteria

Inclusion criteria : all distal radius fracture patients after pinning ; ages 16 to 70 ; ASAPS less than IV Exclusion criteria : concomitant fracture ; vessel involvement or compartment syndrome ; open fracture ; history of anti psychotic ,anti depressant , anti convulsant or corticosteroids drugs use ; history of psychotic or psychosomatic disease ; conversion disease ; chronic drug use ; high energy trauma ; need for open reduction ; contraindication for axillary block ; unsuccessful block exclusion a non successful block

Age

From **18 years** old to **70 years** old

Gender

Both

Phase

N/A

Groups that have been masked*No information***Sample size**Target sample size: **50****Randomization (investigator's opinion)**

Randomized

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**

Research Assistant of Tehran University of Medical Sciences

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Approval date

2011-06-20, 1390/03/30

Ethics committee reference number

90-03-30-14966

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

Complex Regional Pain Syndrome

ICD-10 code

M89.0

ICD-10 code description

Shoulder-hand syndrome Sudeck's atrophy Sympathetic reflex dystrophy

2**Description of health condition studied**

Distal Radius Fracture

ICD-10 code

s52.5

ICD-10 code description

Fracture of lower end of radius

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

Complex Regional Pain Syndrome

Timepoint

one week , 1,2 and 6 mounths

Method of measurement

IASP criteria

2**Description**

Sensory and motor block of upper limb

Timepoint

0.5 , 2,4,6,12,24,48 hour

Method of measurement

VAS criteria and history taking

Secondary outcomes**1****Description**

nerve block complications

Timepoint

0.5 ,2,4,6,12,24,48 hours

Method of measurement

history taking nd examination

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

intervention group : axillary nerve block

Category

Prevention

2**Description**

control group : no intervention

Category

N/A

Recruitment centers**1****Recruitment center****Name of recruitment center**

Emrgency Department of Imam Khomeini Hospital

Full name of responsible person

Dr. Sadegh Saberi

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Imam Khomeini Hospital , Dr Gharib street

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Tehran

Sponsors / Funding sources

1

Sponsor

Name of organization / entity
Tehran 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

Tehran 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

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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