

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

07 Jun 2026

### comparison of the effect of low level laser and lidocaine with lidocaine alone on tourniquet pain during surgery of distal radius fracture with intravenous regional block

#### Protocol summary

##### Summary

The aim of this study is evaluation of the effect of low level laser on reducing tourniquet pain during surgery of distal radius fracture with intravenous regional block. In this prospective double blind randomized study 48 patient were divided in intervention and control group . Inclusion criteria : ASA class I & II ; 18-50 years old . Exclusion criteria : raynaud disease ; scleroderma ; sickle cell anemia ; malignancy ; photo sensitivity ; convulsion ; pregnancy . Intravenous regional block with lidocaine is done in both groups equally. , in intervention group 24 patient received infra red laser radiation after tourniquet inflation and in control group 24 patient received off laser after tourniquet inflation .Tourniquet pain was measured at 10 , 20 , 30 , 40 and 50 minutes after tourniquet inflation by Visual Analogue Scale . Postoperative pain was measured at 2 , 4 , 8 , 12 and 24 hour after tourniquet deflation.

#### General information

##### Acronym

##### IRCT registration information

IRCT registration number: **IRCT2012081810509N3**  
Registration date: **2012-12-14, 1391/09/24**  
Registration timing: **retrospective**

Last update:

Update count: **0**

##### Registration date

2012-12-14, 1391/09/24

##### Registrant information

##### Name

Sholeh Nesioonpour

##### Name of organization / entity

Ahvaz Jundishapur Medical University

##### Country

Iran (Islamic Republic of)

##### Phone

+98 61 1222 0168

##### Email address

nesioonpour-sh@ajums.ac.ir

##### Recruitment status

**Recruitment complete**

##### Funding source

Ahvaz Jundishapur University of Medical Sciences

##### Expected recruitment start date

2012-04-24, 1391/02/05

##### Expected recruitment end date

2012-11-25, 1391/09/05

##### Actual recruitment start date

empty

##### Actual recruitment end date

empty

##### Trial completion date

empty

##### Scientific title

comparison of the effect of low level laser and lidocaine with lidocaine alone on tourniquet pain during surgery of distal radius fracture with intravenous regional block

##### Public title

Effect of low level laser on torniquet pain in intravenous regional block

##### Purpose

Prevention

##### Inclusion/Exclusion criteria

Inclusion criteria : ASA class I & II ; 18-50 years old

Exclusion criteria : raynaud disease ; scleroderma ; sickle cell anemia ; malignancy ; photo sensitivity ; convulsion ; pregnancy

##### Age

From **18 years** old to **50 years** old

**Gender**

Both

**Phase**

N/A

**Groups that have been masked**

No information

**Sample size**

Target sample size: **48**

**Randomization (investigator's opinion)**

Randomized

**Randomization description****Blinding (investigator's opinion)**

Double blinded

**Blinding description****Placebo**

Used

**Assignment**

Parallel

**Other design features****Secondary Ids**

empty

**Ethics committees****1****Ethics committee****Name of ethics committee**

Ahvaz Jundishapur University of Medical science

**Street address**

Shahrak Daneshgah , Golestan

**City**

Ahvaz

**Postal code****Approval date**

2012-04-21, 1391/02/02

**Ethics committee reference number**

ETH-441

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

Pain

**ICD-10 code**

R52.0

**ICD-10 code description**

Acute Pain

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

Pain

**Timepoint**

10 , 20 , 30 , 40 , 50 minute after tourniquet inflation

**Method of measurement**

Visual Analogue Scale

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

Postoperative Pain

**Timepoint**

2 , 4 , 8 , 12 , 24 hour after surgery

**Method of measurement**

Visual Analogue Scale

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

In control group patients received off laser after tourniquet inflation

**Category**

Prevention

**2****Description**

In intervention group patients received infra red laser radiation after tourniquet inflation

**Category**

Prevention

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

Imam Khomeini Hospital

**Full name of responsible person**

Dr Sholeh Nesioonpour

**Street address**

Azadegan Avenue

**City**

Ahvaz

**Sponsors / Funding sources****1****Sponsor****Name of organization / entity**

Ahvaz Jundishapur University of Medical Sciences

**Full name of responsible person**

Dr Mostafa Fegghi

**Street address**

Shahrak Daneshgah , Golestan

**City**

Ahvaz

**Grant name****Grant code / Reference number****Is the source of funding the same sponsor**

**organization/entity?**

Yes

**Title of funding source**

Ahvaz Jundishapur 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**

School of Medicine , Ahvaz Jundishapur of Medical Science

**Full name of responsible person**

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**Position**

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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*