

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

08 Jun 2026

### Efficacy of low level laser on reducing the post operative acute pain in patients who have been undergoing leg surgery

#### Protocol summary

##### Summary

The aim of this study is to investigate the effect of laser on acute post operative pain after leg surgery in patients undergoing spinal anesthesia. In this prospective double blind randomized study 54 patients were divided in intervention and control group. Inclusion criteria : ASA class I & II ; 18-50 years old . Exclusion criteria: pregnancy, malignancy, benign tumors with probability of being malignant, hypersensitivity to light like lupus and contraindications of spinal anesthesia (patient refusal, infection at the site of planned needle puncture, elevated intracranial pressure and bleeding diathesis). Spinal anesthesia with 12.5 mg Marcaine will be done in both groups equally. In the intervention group 27 patients received red and infra red laser radiation at the end of surgery. and in control group 27 patients received off laser after surgery. Postoperative pain and needs for analgesics will be measured at 2 , 4 , 8 , 12 and 24 hours after surgery.

#### General information

##### Acronym

##### IRCT registration information

IRCT registration number: **IRCT2012121410509N4**

Registration date: **2013-03-09, 1391/12/19**

Registration timing: **registered\_while\_recruiting**

Last update:

Update count: **0**

##### Registration date

2013-03-09, 1391/12/19

##### 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 Science

##### Expected recruitment start date

2012-12-21, 1391/10/01

##### Expected recruitment end date

2013-06-22, 1392/04/01

##### Actual recruitment start date

empty

##### Actual recruitment end date

empty

##### Trial completion date

empty

##### Scientific title

Efficacy of low level laser on reducing the post operative acute pain in patients who have been undergoing leg surgery

##### Public title

The effect of low level laser on pain after leg surgery

##### Purpose

Prevention

##### Inclusion/Exclusion criteria

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

Exclusion criteria : pregnancy ; malignancy ; benign

tumors with probability of being malignant ;

hypersensitivity to light like lupus ; contraindications of

spinal anesthesia (patient refusal ; infection at the site of

planned needle puncture ; elevated intracranial pressure

and bleeding diathesis)

##### 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: **54**

**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**

Golestan

**City**

Ahvaz

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

2012-12-19, 1391/09/29

**Ethics committee reference number**

ETH-654

**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**

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

**Method of measurement**

Visual Analogue Scale

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

Opioid Consumption

**Timepoint**

24 hours after surgery

**Method of measurement**

milligram

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

In intervention group patients received infrared and red laser radiation after the end of surgery

**Category**

Prevention

**2****Description**

In control group patients received off laser after the end of surgery

**Category**

Prevention

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

Imam Khomeini Hospital

**Full name of responsible person**

Dr Salman Vojdani

**Street address**

Azadegan Avenue

**City**

Ahvaz

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

Ahvaz Jundishapur University of Medical Science

**Full name of responsible person**

Dr Mostafa Fegghi

**Street address**

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 Science

**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**

Ahvaz Jundishapur University of Medical Science

**Full name of responsible person**

Dr Salman Vejdani

**Position**

Anesthesia Resident

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**Web page address****Person responsible for scientific inquiries****Contact****Name of organization / entity**

School of Medicine

**Full name of responsible person**

Dr Sholeh Nesioonpour

**Position**

Assistant Professor of Anesthesia

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**Web page address****Person responsible for updating data****Contact****Name of organization / entity**

Ahvaz Jundishapur University of Medical Science

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Dr Sholeh Nesioonpour

**Position**

Assistant Professor of Anesthesia

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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*