

Clinical Trial Protocol

Iranian Registry of Clinical Trials

21 Jul 2026

Clinical trial of evaluation of the efficacy of low level laser in comparison with off laser on postoperative pain in patients who have been undergoing cesarean section

Protocol summary

Summary

The aim of this study is to investigate the effect of low level laser on acute post operative pain after cesarean section in patients undergoing spinal anesthesia. In this prospective double blind randomized study 70 patients were divided randomly in intervention and control groups . Inclusion criteria: gravid 1,2 ; 18-40 years old ; ASA I,II. Exclusion criteria : patient refusal ; elevated intracranial pressure ; bleeding diathesis ; infection at the site of planned needle puncture ; lower extremity peripheral neuropathy ; classic cesarean scar ; malignancy ; benign tumors with probability of being malignant ; hypersensitivity to light like lupus ; history of convulsion ; spinal anesthesia with 12 milligram bupivacaine will done in both groups . In intervention group 35 patients received Red and Infrared laser after surgery. In control group patients received off laser . Postoperative pain and pethidine consumption will measured at 1,4,8,12,16 and 24 hours after surgery. the operator of laser know the patient group and the patients and the person who complete questionnaire are blinded to patient groups.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT2013061210509N5**
Registration date: **2015-03-17, 1393/12/26**
Registration timing: **retrospective**

Last update:

Update count: **0**

Registration date

2015-03-17, 1393/12/26

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

2013-05-11, 1392/02/21

Expected recruitment end date

2014-07-12, 1393/04/21

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Clinical trial of evaluation of the efficacy of low level laser in comparison with off laser on postoperative pain in patients who have been undergoing cesarean section

Public title

The effect of low level laser on postoperative pain after cesarean section

Purpose

Prevention

Inclusion/Exclusion criteria

Inclusion criteria : Pregnant women 18-40 years ; gravid 1,2 ; ASA Class I,II Exclusion Criteria : patient refusal ; elevated intracranial pressure ; bleeding diathesis ;

infection at the site of planned needle puncture ; lower extremity peripheral neuropathy ; classic cesarean scar ; malignancy ; benign tumors with probability of being malignant ; hypersensitivity to light like lupus ; history of convulsion

Age

From **18 years** old to **40 years** old

Gender

Female

Phase

2

Groups that have been masked

No information

Sample size

Target sample size: **70**

Randomization (investigator's opinion)

Randomized

Randomization description

Blinding (investigator's opinion)

Double blinded

Blinding description

Placebo

Used

Assignment

Parallel

Other design features

the operator of laser know the patient group and the patients and the person who complete the questionnaire are blinded to patient groups.

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Ethics Committee of Ahvaz Jundishapur University of Medical Science

Street address

Golestan, Shahrak Daneshgah

City

Ahvaz

Postal code

Approval date

2013-05-11, 1392/02/21

Ethics committee reference number

ajums.rec.1392.40

Health conditions studied

1

Description of health condition studied

Postoperative Pain

ICD-10 code

R52.0

ICD-10 code description

Acute Pain

Primary outcomes

1

Description

Pain

Timepoint

1,4,8,12,16,24 hours after end of anesthesia

Method of measurement

VAS questionnaire

Secondary outcomes

1

Description

Opioid Consumption

Timepoint

24 hours after surgery

Method of measurement

questionnaire

Intervention groups

1

Description

In intervention group patients received infrared and red laser (PLP-IR-808nm-200mw, PLP-R-650nm-100mw) radiation manufactured by COL center-Canada once after the end of surgery

Category

Prevention

2

Description

In control group patients received off laser once 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 Sholeh Nesioonpour

Street address

Azadegan Avenue

City

Ahvaz

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Ahvaz Jundishapur University of Medical Sciences,
Vice Chancellor for Research and Technology

Full name of responsible person

Dr Nader Saki

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, Vice
Chancellor for Research and Technology

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 University of
Medical Sciences

Full name of responsible person

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