Clinical Trial Protocol
Iranian Registry of Clinical Trials

16 Sep 2026

Compare between non steroid anti inflammatory drug and Different Frequency of pulse low level laser therapy in acute Low Back Pain

Protocol summary

Summary

Goal: this study done to compare between anti-inflammatory effects of two different frequency of pulse low level laser therapy with dose of 6 j/cm2 and NSAID therapy in patients with acute LBP. Design: Double-blind, randomized, placebo-controlled study. Material & method: study performed in four groups of acute LBP with radiculopathy is associated with pain and disability; group A is treated with analgesic dose of NSAID and active pulse low level laser therapy with frequency of 10 Hz and dose of 6 j/cm2, group with same doses of NSAID and active pulse low level laser therapy with same dose with frequency of 250 Hz; group C with placebo LLLT and same dose of NSAID and group D only NSAID therapy. LLLT with same dose but with two different frequency is applied behind the involved spine segments in six areas. Patients treated 3 times per week for a total 12 treatments with following parameters, wavelength of 810 nm and dose of 6 j/cm2 with frequencies of 10 and 250 hz .outcome is pain intensity measured with visual analogue scale in lumbar and leg segments and ODI questionnaire of ADL. VAS measures before and after and with one week interval and ODI questionnaire before and after treatments.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT2013052213146N2**
Registration date: **2013-12-15, 1392/09/24**
Registration timing: **registered_while_recruiting**

Last update:
Update count: **0**

Registration date

2013-12-15, 1392/09/24

Registrant information

Name
Maryam Hayati
Name of organization / entity
Tehran University of Medical Sciences
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Recruitment status

Recruitment complete

Funding source

Qazvin University of Medical Sciences

Expected recruitment start date

2013-11-22, 1392/09/01

Expected recruitment end date

2014-06-22, 1393/04/01

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Compare between non steroid anti inflammatory drug and Different Frequency of pulse low level laser therapy in acute Low Back Pain

Public title

Compare between pulse lasertherapy and none steroid antiinflamatory drug in acute low back pain

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria: LBP less than3 months; age range between 30-60 years old; not pregnant; have not spinal surgery in recent years; have not systemic and

psychological disorders. Exclusion criteria: spondylosis; spinal stenosis; malignant inflammatory disorders; smoking and addiction.

Age
From **30 years** old to **60 years** old

Gender
Both

Phase
N/A

Groups that have been masked
No information

Sample size
Target sample size: **160**

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
Qazvin University of Medical Sciences

Street address
Qazvin University of Medical Sciences, Bahonar bolverd

City
Qazvinq

Postal code
59811-34197

Approval date
2012-06-25, 1391/04/05

Ethics committee reference number
28/20/6035

Health conditions studied

1

Description of health condition studied
Acute low back pain

ICD-10 code
M51.2

ICD-10 code description
Other specified intervertebral disc displacement

Primary outcomes

1

Description
Pain

Timepoint
Before and after and weekly during treatment

Method of measurement
VAS scale

2

Description
Functional quality

Timepoint
Before and after

Method of measurement
ODI questionaire

Secondary outcomes

empty

Intervention groups

1

Description
6 j/cm2 low level laser therapy with frequency of 10 hz and NSAID therapy with analgesic dose

Category
Other

2

Description
placebo low level laser therapy and NSAID therapy with analgesic dose

Category
Placebo

3

Description
6 j/cm2 low level laser therapy with frequency of 250 hz and NSAID therapy with analgesic dose

Category
Treatment - Other

4

Description
NSAID therapy with analgesic dose s a control group

Category
Treatment - Drugs

Recruitment centers

1

Recruitment center

Name of recruitment center

Medical center of Qazvin University of Medical Sciences

Full name of responsible person

Dr Mahnaz Abbasi

Street address

Opposite of Mehregan hospital, Ferdosi avenue

City

Qazvin

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Qazvin University of Medical Sciences

Full name of responsible person

Dr Mahnaz Abbasi

Street address

Vice-chancellor for research, Qazvin University of Medical Sciences

City

Qazvin

Grant name

Grant code / Reference number

Is the source of funding the same sponsor organization/entity?

Yes

Title of funding source

Qazvin 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

Tehran University of Medical Sciences

Full name of responsible person

Maryam Hayati

Position

PhD candidate

Other areas of specialty/work

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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