

Clinical Trial Protocol

Iranian Registry of Clinical Trials

30 Jun 2026

Assessment of the effectiveness of low level laser therapy on the post-operative pain in the patient with lumbar disk herniation

Protocol summary

Summary

Objectives: The aim of this study is the Assessment of the effectiveness of low level laser therapy on the post-operative pain in the patient with lumbar disk herniation . **Design:** Randomized clinical trial. **Setting and Conduct:** We study 60 patients referring for lumbar disc herniation surgery to Tabriz SHohada hospital in the form of two equal groups . Patients will randomly be assigned into one of two groups. We use Low Level Laser for one group and routine analgesic drugs for the other group, the pain in the patients was assessed by Visual Analogue Scale(VAS) in each group and was compared to each other. **Participants including major eligibility criteria:** Patients referring for lumbar disc herniation surgery at the age range of 20 to 50 years will enroll into the study. Patients with chronic usage of any drugs, history of diabetes, surgical infectious wound due to any reason and history of relapsed herniation will be excluded. **Intervention:** After randomly assigning into two groups we use low level laser therapy for one group and routine analgesic drugs for the other group. **Main outcome measures (variables):** Post operative pain.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT2013052612853N1**

Registration date: **2013-07-01, 1392/04/10**

Registration timing: **retrospective**

Last update:

Update count: **0**

Registration date

2013-07-01, 1392/04/10

Registrant information

Name

Mohammad Shimia

Name of organization / entity

Tabriz University of Medical Sciences and Health services

Country

Iran (Islamic Republic of)

Phone

+98 41 1336 7774

Email address

shimia@tbzmed.ac.ir

Recruitment status

Recruitment complete

Funding source

Tabriz University of Medical Sciences

Expected recruitment start date

2012-03-20, 1391/01/01

Expected recruitment end date

2012-12-20, 1391/09/30

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Assessment of the effectiveness of low level laser therapy on the post-operative pain in the patient with lumbar disk herniation

Public title

Assessment of the effectiveness of low level laser therapy on the post-operative pain in the patient with lumbar disk herniation

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria: 1-Being at the age between 20-50 years; 2-Consent for the research. Exclusion criteria: 1- History Diabetes; 2-History of chronic usage of any drug

in the past 6 months; 3-Patients undergoing the surgery due to relapse of lumbar disc herniation; 4-Patients with surgical infectious wound due to any cause.

Age

From **20 years** old to **50 years** old

Gender

Both

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: **60**

Randomization (investigator's opinion)

Randomized

Randomization description

Blinding (investigator's opinion)

Not blinded

Blinding description

Placebo

Not used

Assignment

Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Ethics committee of Tabriz University of medical sciences and health services

Street address

Central office of Tabriz university of medical sciences, Golgasht street, Azadi street.

City

Tabriz

Postal code

5165687386

Approval date

2012-11-11, 1391/08/21

Ethics committee reference number

91130

Health conditions studied

1

Description of health condition studied

post operative pain

ICD-10 code

Y83.9

ICD-10 code description

Surgical procedure, unspecified

Primary outcomes

1

Description

Post operative pain

Timepoint

3 hours, 6 hours, 12 hours, 18 hours, 24 hours, 36 hours, 48 hours, 1 month, 2 months and 3 months after the surgery

Method of measurement

Visual analogue scale(VAS)

Secondary outcomes

empty

Intervention groups

1

Description

Intervention group: Laser irradiation will be done using a low level laser device mustang-026-Bio close to wound,10 minutes each time.

Category

Treatment - Other

2

Description

Control group: The analgesic treatment will be done using routine analgesic drugs

Category

Treatment - Drugs

Recruitment centers

1

Recruitment center

Name of recruitment center

Tabriz Imam Reza Hospital

Full name of responsible person

Dr.Mohammad Shimai

Street address

Imam Reza hospital, Golgasht street, Tabriz

City

Tabriz

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Vice chancellor for reserach, Tabriz university of medical sciences

Full name of responsible person

Seyed Kazem Shakouri

Street address

Golgasht street, Daneshgah street, Tabriz

City
Tabriz

Grant name

Grant code / Reference number

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

Title of funding source
Vice chancellor for reserach, Tabriz 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
Tabriz faculty of Medicine, Tabriz university of medical sciences

Full name of responsible person
Dr. Mohammad Shimia

Position
Neurosurgeon, Associate Proffessor

Other areas of specialty/work

Street address
Neurosurgery ward, Tabriz Imam Reza hospital, Daneshgah street, Tabriz

City
Tabriz

Postal code
5166614711

Phone
+98 41 1337 3966

Fax

Email
shimia@tbzmed.ac.ir

Web page address

Person responsible for scientific inquiries

Contact

Name of organization / entity
Tabriz faculty of Medicine

Full name of responsible person
Dr. Reza Movassaghi

Position

Anesthesiologist, Assistant Proffessor

Other areas of specialty/work

Street address
Anesthesiology educational group, Tabriz faculty of medicine, Daneshgah street, Tabriz

City
Tabriz

Postal code
5154916656

Phone
+98 41 1337 2408

Fax

Email
daghamohamadi@yahoo.com

Web page address

Person responsible for updating data

Contact

Name of organization / entity
Tabriz faculty of medicine

Full name of responsible person
Dr. Aydin Kazemipoorazar

Position
Resident of Neurosurgery

Other areas of specialty/work

Street address
Neurosurgery ward, Tabriz Imam Reza hospital, Daneshgah street, Tabriz

City
Tabriz

Postal code
5154916616

Phone
+98 41 1337 3966

Fax

Email
drporazar@yahoo.com

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