

Clinical Trial Protocol

Iranian Registry of Clinical Trials

10 Jun 2026

Effects of magnetotherapy and lumbar traction on the patients of sciatica

Protocol summary

Study aim

To determine the effectiveness of magnetotherapy and lumbar traction on sciatica patients.

Design

This is a double-blind, randomized, two phase study. subjects will be randomized to 2 different treatments in a cross-over design.

Settings and conduct

Johar medicare complex, lahore Green international University, Lahore Ali Fatima Hospital Lahore

Participants/Inclusion and exclusion criteria

Inclusion criteria: Low back pain of 3 months duration or longer present at least 5 out of 7 days a week Age between 28-80 at the start of the study Men and women of all ethnicities Signs and symptoms of lumbar radiculopathy. Willingness to refrain from making changes in non-study medications taken for sciatica Patients with failed back syndrome. Pain level of at least 4/10 on average on a scale of 0 to 10 for the past month Pain not attributable to malignancy, inflammatory arthritis such as rheumatoid arthritis, or infection by previous examinations or by laboratory testing Patients' agreement to keeping a log of their pain level and documentation of compliance with wearing of back device. Patients' agreement not to make changes in pain medication type of dosing during the study. Women of reproductive age agreeing to undergo a pregnancy test at baseline. Exclusion criteria: Patients with pacemakers Patients with mechanical heart pumps Pregnancy or breast feeding Presence of pain of greater intensity in any other location than the low back or the leg Presence of active cancer History of spinal infection Patients s/p spinal fusion with spinal rods over the lower lumbar spine

Intervention groups

group 1: magnetotherapy group 2: magnetotherapy with lumbar traction

Main outcome variables

reduction of pain and numbness in low back and leg

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20210822052250N1**

Registration date: **2022-06-24, 1401/04/03**

Registration timing: **prospective**

Last update: **2022-06-24, 1401/04/03**

Update count: **0**

Registration date

2022-06-24, 1401/04/03

Registrant information

Name

Mohtishim Ahmed

Name of organization / entity

Riphah international university, Lahore

Country

Pakistan

Phone

+92 42 35035189

Email address

mohhtishim_7@hotmail.com

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2022-08-01, 1401/05/10

Expected recruitment end date

2023-04-01, 1402/01/12

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Effects of magnetotherapy and lumbar traction on the patients of sciatica

Public title

Effects of magnetotherapy and lumbar traction on the patients of sciatica

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria:

Having mechanical neck pain more than three months and less than two years age between 25 and 60 years having normal laboratory test results absence of fracture, dislocation, tumor or infection on radiological investigation pain severity of at least 4/10 according to the visual analog scale (VAS) willingness to sign the informed consent form. Presence of disc bulge, protrusion or herniation at L4-L5, and L5-S1 level

Exclusion criteria:

pregnancy and breastfeeding having a cardiac pacemaker implanted metal implant or electronic device in any part of body a prior trauma (whiplash), surgical or algological intervention in lumbar area history or suspicion of any malignancy presence of inflammatory joint pain or diagnosis of a rheumatic disease presence of an open superficial wound presence of more severe pain in any part of body other than low back pain an advanced stage mood disorder, a neurological disorder (multiple sclerosis, syringomyelia, or Parkinson's disease) radiographical Grade ≥ 2 spondylolisthesis, spinal instability or advanced spondylarthrosis physical therapy for back pain within the last six months a history of drug use other than paracetamol (NSAIDs, centrally acting and narcotic analgesics) or discontinuation of such drugs less than three months before the enrolment.

Age

From **25 years** old to **60 years** old

Gender

Both

Phase

2-3

Groups that have been masked

- Participant
- Care provider
- Investigator

Sample size

Target sample size: **60**

More than 1 sample in each individual

Number of samples in each individual: **2**

the 1st treatment is provided on any selective day for that particular patient. the treatment session will be repeated after 3 days of the 1st session

Randomization (investigator's opinion)

Randomized

Randomization description

60 patients have been selected by simple random sampling. participants names are drawn randomly from a pool where everyone has an even probability of being chosen. The participants are then asked to pick up the sealed opaque envelope on the basis of which participants are divided into 2 equal groups. The

participants who choose sealed envelope with Group A are placed in Group A and those choose Group B are placed in group B. both groups contain 30 participants each.

Blinding (investigator's opinion)

Double blinded

Blinding description

Assessment and treatment will be performed by two individuals. Assessor and analyzer of the data are those who are unaware of the grouping and will be unaware of which group each subject belongs to. The assessor is present only at the time of assessment (before and after treatment).

Placebo

Not used

Assignment

Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Research and ethics committee GIU

Street address

Green international university, 9km raiwind road, bhoptian chowk Lahore

City

Lahore

Postal code

Green international

Approval date

2022-02-15, 1400/11/26

Ethics committee reference number

R&EC/GIU/2254

Health conditions studied

1

Description of health condition studied

Sciatica

ICD-10 code

M54.3

ICD-10 code description

Sciatica

Primary outcomes

1

Description

Daily overall pain level

Timepoint

3 days

Method of measurement

scale of 0 to 10

2

Description

pain in the low back

Timepoint

3 days

Method of measurement

0-10 pain scale

3

Description

pain in the lower extremities

Timepoint

3 days

Method of measurement

0-10 pain scale

Secondary outcomes

1

Description

quality of life

Timepoint

3 days

Method of measurement

questionnaire: SF 36

Intervention groups

1

Description

Intervention group 1: In this group, patients with sciatica are exposed to regular soft tissue release, isometric exercises, stretching and Lumbar traction. these individuals are not exposed to magnetotherapy unit.

Category

Treatment - Devices

2

Description

Intervention group 2: In this group, patients with sciatica are exposed to regular soft tissue release, isometric exercises, stretching, Lumbar traction and magnetotherapy. these individuals are exposed to magnetotherapy unit which is a special modality based on biomagnetism. the upper pole is north while the lower pole is south. the field generate in north to south direction, pressing the disc bulge to the neutral position.

Category

Treatment - Devices

Recruitment centers

1

Recruitment center

Name of recruitment center

Johar medicare complex. lahore

Full name of responsible person

Dr. Mohtishim Ahmed

Street address

Johar medicare complex, 36-R, Shahalam Road, near Ayub chowk, Johar town, Lahore

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mohtishim.ahmed@giu.edu.pk

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Green international University

Full name of responsible person

Prof. Dr. Khaliq-ur-Rehman

Street address

green international university, 9km raiwind road, bhoptian chowk, lahore

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+92 322 4057371

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Grant name

Grant code / Reference number

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

Yes

Title of funding source

Green international University

Proportion provided by this source

10

Public or private sector

Private

Domestic or foreign origin

Domestic

Category of foreign source of funding

empty

Country of origin

Type of organization providing the funding

Academic

Person responsible for general inquiries

Contact

Name of organization / entity

Green international university, lahore

Full name of responsible person

Dr. Mohtishim Ahmed

Position

lecturer

Latest degree

Master

Other areas of specialty/work

Physiotherapy

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Johar medicare complex, 36-R, Shahalam Road, near Ayub chowk, Johar town, Lahore

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

Green international university, lahore

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

Green international University, Lahore

Full name of responsible person

Dr. Mohtishim Ahmed

Position**Sharing plan****Deidentified Individual Participant Data Set (IPD)**

Yes - There is a plan to make this available

Study Protocol

Undecided - It is not yet known if there will be a plan to make this available

Statistical Analysis Plan

No - There is not a plan to make this available

Informed Consent Form

No - There is not a plan to make this available

Clinical Study Report

Yes - There is a plan to make this available

Analytic Code

Undecided - It is not yet known if there will be a plan to make this available

Data Dictionary

Undecided - It is not yet known if there will be a plan to make this available

Title and more details about the data/document

Effects of magnetotherapy and traction on the patients of sciatica

When the data will become available and for how long

data will be available after publication for 2 months

To whom data/document is available

to the research committees only

Under which criteria data/document could be used

copy right

From where data/document is obtainable

from the primary author only

What processes are involved for a request to access data/document

simple email the primary author by mentioning the reason

Comments

no other information will be required