Clinical Trial Protocol
Iranian Registry of Clinical Trials

22 Nov 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

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Pakistan

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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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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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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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Person responsible for updating data

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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