Clinical Trial Protocol
Iranian Registry of Clinical Trials

22 Nov 2026

Effects of Mulligan Traction Leg Raise versus Slump Stretching on Pain, Passive Leg Raise, and Functional Disability in Lumbar Radiculopathy

Protocol summary

Study aim

The objective of the study is to compare the effects of Mulligan Traction Leg Raise versus Slump Stretching on Pain, Passive Leg Raise, and Functional Disability in Lumbar Radiculopathy

Design

A concealed, randomized, single blinded, clinical trial with a parallel group design of 44 patients. Lottery method will be used for Randomization.

Settings and conduct

It will be Randomized clinical trial Study will be conducted in Family Clinic Baghbanpura, Lahore It is a Single blinded trial in which the participants are deliberately kept ignorant of either the group to which they have been assigned or key information about the materials they are assessing

Participants/Inclusion and exclusion criteria

Inclusion criteria: • Pre diagnosed with lumbar radiculopathy • Age group of 30-60 years • SLR test positive • All subjects with unilateral or bilateral radiation of pain in sciatic nerve distribution • Female patients • Participants willing to participate in the study 2 Exclusion criteria: • History of spinal surgery in previous 6 months • Knee and ankle pathology causing limitation of movement • Clinical conditions such as over sensitive skin, patient with cardiac pacemaker, pregnancy etc, • Serious spinal condition e.g infection, tumors, osteoporosis, spinal fracture • Inability to hold slump stretching position, reproduction of symptoms on neck flexion part of slump test • Patients with cervicogenic headache, VBI, spinal deformities and ankylosing spondylitis

Intervention groups

Group A : Mulligan Traction Leg Raise Group B : Slump Stretching

Main outcome variables

Pain will be measured through Numeric Pain Rating Scale (NPRS) Straight leg raise range of motion will be measured through Goniometer Disability will be measured through Oswestry disability index scale

General information

Reason for update

Acronym

EMTLRSSSPPLRFDLR

IRCT registration information

IRCT registration number: **IRCT20190715044216N3**
Registration date: **2021-12-27, 1400/10/06**
Registration timing: **prospective**

Last update: **2021-12-27, 1400/10/06**
Update count: **0**

Registration date

2021-12-27, 1400/10/06

Registrant information

Name

Naveed Anwar

Name of organization / entity

Riphah International University

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Pakistan

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Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2022-01-01, 1400/10/11

Expected recruitment end date

2022-07-11, 1401/04/20

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Effects of Mulligan Traction Leg Raise versus Slump Stretching on Pain, Passive Leg Raise, and Functional Disability in Lumbar Radiculopathy

Public title

Effects of Mulligan Traction Leg Raise versus Slump Stretching on Pain, Passive Leg Raise, and Functional Disability in Lumbar Radiculopathy

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria:

Pre diagnosed with lumbar radiculopathy Age group of 30-60 years SLR test positive All subjects with unilateral or bilateral radiation of pain in sciatic nerve distribution Male and Female patients Participants willing to participate in the study

Exclusion criteria:

History of spinal surgery in previous 6 months Knee and ankle pathology causing limitation of movement Clinical conditions such as over sensitive skin, patient with cardiac pacemaker, pregnancy etc. Serious spinal condition e.g. infection, tumors, osteoporosis, spinal fracture Inability to hold slump stretching position, reproduction of symptoms on neck flexion part of slump test Patients with cervicogenic headache, VBI, spinal deformities and ankylosing spondylitis

Age

From **18 years** old to **50 years** old

Gender

Both

Phase

3

Groups that have been masked

- Participant

Sample size

Target sample size: **44**

Randomization (investigator's opinion)

Randomized

Randomization description

Randomization will be done by lottery method through convenient sampling. Unit of randomization is Individual. Tool used in randomization will be lottery method. Through lottery method each member of the population will be assigned a number, after which numbers will be selected at random. Allocation concealment will carried out.

Blinding (investigator's opinion)

Single blinded

Blinding description

1. It will be a single blinded study 2. Participants of both groups will be kept unfamiliar to the treatment protocol by lottery method. 3. Participants of both groups will be called for treatment on alternate days in a week. 4. Group A will receive Mulligan traction leg raise and lumbar stabilization exercises for 3 days a week and Group B will receive Slump stretching and lumbar stabilization exercises for next 3 days a week. 5. The health care provider (physical therapist) will be aware to the whole treatment procedure that will be provided to the participants.

Placebo

Not used

Assignment

Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Research Review Committee of Riphah College of Rehabilitation Sciences

Street address

Jubilee town , A Block, House no 514

City

Lahore

Postal code

54000

Approval date

2021-12-01, 1400/09/10

Ethics committee reference number

REC/RCR & AHS/21/0105

Health conditions studied

1

Description of health condition studied

lumbar radiculopathy

ICD-10 code

M54.16

ICD-10 code description

Radiculopathy, lumbar region

Primary outcomes

1

Description

Pain

Timepoint

Treatment session includes 3 times per week for 4 weeks for 20 minutes and outcomes will be measured before applying intervention in 1st week and after completion of treatment at 4th week.

Method of measurement

NPRS

2

Description

Straight leg raise range of motion

Timepoint

Treatment session includes 3 times per week for 4 weeks for 20 minutes and outcomes will be measured before applying intervention in 1st week and after completion of treatment at 4th week.

Method of measurement

Goniometer

3

Description

Disability

Timepoint

Treatment session includes 3 times per week for 4 weeks for 20 minutes and outcomes will be measured before applying intervention in 1st week and after completion of treatment at 4th week.

Method of measurement

Oswestry disability index scale

Secondary outcomes

empty

Intervention groups

1

Description

Intervention group A: Mulligan Traction Leg Raise : The subjects will receive Mulligan traction leg raise and and common treatment. Mulligan traction leg raise at available end range will be hold for 10 seconds with max. 3 repetitions. The common treatment include lumbar stabilization exercises. Lumbar stabilization exercises includes static glutei, static back and static hamstring hold for 10 seconds with maximum 10 repetitions. Treatment session was given 3 times per week for 4 weeks. Total duration of each session will be of 20 minutes.

Category

Rehabilitation

2

Description

Intervention group B: Slump Stretching : The subjects will receive Slump stretching and common treatment. Slump Stretching position will be maintained for ten seconds with each session following 3 repetition stretches according to patient’s response. Lumbar stabilization exercises. The common treatment include lumbar stabilization exercises. Lumbar stabilization exercises includes static glutei, static back and static hamstring hold for 10 seconds with maximum 10 repetitions. Treatment session includes 3 times per week for 4 weeks. Total duration of each session will be of 20 minutes. Evaluation will be done before treatment and at the end of 4th week.

Category

Rehabilitation

Recruitment centers

1

Recruitment center

Name of recruitment center

Family clinic

Full name of responsible person

Dr. Anjum Rasheed

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Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Riphah International University

Full name of responsible person

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Grant name

Riphah International University

Grant code / Reference number

not applicable

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

No

Title of funding source

Nill

Proportion provided by this source

1

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

Other

Person responsible for general inquiries

Contact

Name of organization / entity
Riphah International University

Full name of responsible person
Aqsa Irshad

Position
Student

Latest degree
Bachelor

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
Yes - There is a plan to make this available

Statistical Analysis Plan
Yes - There is a plan to make this available

Informed Consent Form
Yes - There is a plan to make this available

Clinical Study Report
Yes - There is a plan to make this available

Analytic Code
Yes - There is a plan to make this available

Data Dictionary
Yes - There is a plan to make this available

Title and more details about the data/document
Effects of Mulligan Traction Leg Raise versus Slump Stretching on Pain, Passive Leg Raise, and Functional Disability in Lumbar Radiculopathy

When the data will become available and for how long
30th June 2022

To whom data/document is available
people working in academic institutions

Under which criteria data/document could be used
Author will review the requests

From where data/document is obtainable
gmail address: aqsairshad958@gmail.com

What processes are involved for a request to access data/document
Requests will be entertained through email after which people working in academic institutions will be granted request

Comments