Clinical Trial Protocol
Iranian Registry of Clinical Trials

22 Nov 2026

Effectiveness of Post Facilitation Stretch Technique versus Myofascial Release in Piriformis Syndrome; A Randomized Controlled Trial

Protocol summary

Study aim

• To determine and compare the effectiveness of post facilitation stretch technique with myofascial release in the management of pain and range of motion in piriformis syndrome. • To improve the quality of life of individuals suffering from Piriformis Syndrome.

Design

Community based, Parallel group, Single blind, Randomized controlled trial

Settings and conduct

Setting was Railway General Hospital, Rawalpindi. Single blind study

Participants/Inclusion and exclusion criteria

Inclusion Criteria: Only Male Patients with Piriformis Tightness and pain along the distribution of Sciatic nerve Age between 20-60 Exclusion Criteria: Acute traumatic cases Patient with disc Herniation Spinal stenosis Lumbar muscle strain Back Pain

Intervention groups

Group A was treated with muscle energy technique (MET), Post facilitation stretch technique, 1 set of 5 repetition/ session, 3 sessions per week on alternate days & conventional physical therapy for six weeks. Group B was treated with Myofascial release technique included 3 set of repetitions per session, 3 sessions per week on alternate days plus conventional Physical therapy. Treated for the period of six weeks. Initially sweep is given to gain analgesic effects. Generally it is applied for appropriate time to achieve desired effects. The position for Myofascial release technique was prone lying and side lying.

Main outcome variables

Pain -Numeric pain rating scale Functional Capacity at lower limb - Lower Extremity Functional Scale

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20210222050451N1**
Registration date: **2021-03-03, 1399/12/13**
Registration timing: **retrospective**

Last update: **2021-03-03, 1399/12/13**
Update count: **0**

Registration date

2021-03-03, 1399/12/13

Registrant information

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Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2016-07-01, 1395/04/11

Expected recruitment end date

2017-01-01, 1395/10/12

Actual recruitment start date

2016-08-01, 1395/05/11

Actual recruitment end date

2017-01-30, 1395/11/11

Trial completion date

2017-02-01, 1395/11/13

Scientific title

Effectiveness of Post Facilitation Stretch Technique versus Myofascial Release in Piriformis Syndrome; A Randomized Controlled Trial

Public title
Effectiveness of Post Facilitation Stretch Technique versus Myofascial Release in Piriformis Syndrome; A Randomized Controlled Trial
Purpose
Treatment
Inclusion/Exclusion criteria
Inclusion criteria:
Only male patients with piriformis muscle tightness Patients with pain along the distribution of sciatic nerve Aged between 20-60 years
Exclusion criteria:
Patients having spinal stenosis Patients with lumbar muscle strain and facet arthrography Acute traumatic cases Disc herniation and back pain patients
Age
From **20 years** old to **60 years** old
Gender
Male

Phase
N/A
Groups that have been masked

- Participant

Sample size
Target sample size: **40**
Actual sample size reached: **30**
Randomization (investigator's opinion)
Randomized
Randomization description
Recruited participants were randomly divided to two groups by coin tossing method.
Blinding (investigator's opinion)
Single blinded
Blinding description
The participants were not aware of their allotment to different groups. Apart that, they were also not aware of the treatment regarding the particular group being given to them.
Placebo
Not used
Assignment
Parallel
Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee
Name of ethics committee
Research ethical committee, RCRS.
Street address
274-Peshawer Road Rawalpindi
City
Islamabad
Postal code
46000
Approval date
2016-07-27, 1395/05/06
Ethics committee reference number
RIPHAH/RCRS/REC/Letter-000131

Health conditions studied

1

Description of health condition studied
Piriformis syndrome is one of the common causes of sciatic pain which negatively affects the activities of daily life of an individual and ultimately leads to poor quality of life. Stretching techniques have proven to produce optimal results in the management of piriformis syndrome; however, there is little evidence available on the type of the most effective stretching technique with respect to clinical outcome.
ICD-10 code
ICD-10 code description

Primary outcomes

1

Description
Pain intensity, measured via Numeric pain rating scale (NPRS)
Timepoint
After 6 weeks
Method of measurement
Numeric Pain Rating Scale will be used to assess the Pain intensity level.

2

Description
Lower Extremity Functional level
Timepoint
After 6 weeks
Method of measurement
Lower Extremity Functional Scale (LEFS)

Secondary outcomes

1

Description
Rotation at joint and range of motion
Timepoint
After 6 weeks
Method of measurement
Goniometer

Intervention groups

1

Description
Intervention group:

Category
Rehabilitation

Recruitment centers

1

Recruitment center
Name of recruitment center
Research ethical committee, RCRS.
Full name of responsible person
Research ethical committee, RCRS.
Street address
274-Peshawer Road Rawalpindi
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Sponsors / Funding sources

1

Sponsor
Name of organization / entity
Riphah International University, Islamabad
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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
Riphah International University, Islamabad
Proportion provided by this source
100
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
Shifa Tameer e Millat University
Full name of responsible person
Dr. Muhammad Junaid Akram
Position
Lecturer
Latest degree
Master
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Person responsible for updating data

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Sharing plan

Deidentified Individual Participant Data Set (IPD)
No - There is not a plan to make this available
Justification/reason for indecision/not sharing IPD
There is no further information
Study Protocol
No - There is not 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
No - There is not a plan to make this available
Analytic Code
No - There is not a plan to make this available
Data Dictionary
No - There is not a plan to make this available