

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

10 Jun 2026

### EFFECTS OF GRASTON INSTRUMENT SOFT TISSUE MOBILIZATION IN PATIENTS WITH SCIATIC NERVE ENTRAPMENT

#### Protocol summary

##### Study aim

To determine the effect of graston instrument soft tissue mobilization in patients with sciatic nerve entrapment.

##### Design

Randomized Clinical Trial

##### Settings and conduct

Fatima Memorial Hospital Shadman Lahore.

##### Participants/Inclusion and exclusion criteria

Inclusion Criteria 1. Onset of radicular low back pain of less than 12 weeks. 2. Pain upon active SLR in 30-70°. Sensitivity: 0.67 (11) Specificity: 0.26 (12) 3. Age group in range of 30-60 years. 4. Male only. 5. Sciatic nerve entrapment diagnosed on MRI Exclusion Criteria 1. Spinal Fracture. 2. Spinal tumor or any malignancy. 3. Psychiatric Disorder. 4. History of Osteoporosis. 5. Rheumatologic disorders. 6. Pain beyond 70° or below 30° on active SLR. 7. Positive compression and distraction test of SI joint. 8. Positive gaenslen's test. 9. Any red flags.

##### Intervention groups

Group A: Participants will receive graston instrument soft tissue mobilization. Group B: Participants will receive combine treatment of graston instrument technique with lumbar traction and neural mobilization.

##### Main outcome variables

Numeric Pain Rating Scale (Pain) Modified Oswestry Disability Index (Functional Disability)

#### General information

##### Reason for update

##### Acronym

EOGISTMIPWSNE

##### IRCT registration information

IRCT registration number: **IRCT20191130045554N1**

Registration date: **2020-01-20, 1398/10/30**

Registration timing: **registered\_while\_recruiting**

Last update: **2020-01-20, 1398/10/30**

Update count: **0**

##### Registration date

2020-01-20, 1398/10/30

##### Registrant information

###### Name

Muhammad Shahzad Qadree

###### Name of organization / entity

Riphah International University QIE Campus Lahore

###### Country

Pakistan

###### Phone

+92 42 35126110

###### Email address

shhzdqadree@gmail.com

##### Recruitment status

**Recruitment complete**

##### Funding source

##### Expected recruitment start date

2019-12-02, 1398/09/11

##### Expected recruitment end date

2020-03-03, 1398/12/13

##### Actual recruitment start date

empty

##### Actual recruitment end date

empty

##### Trial completion date

empty

##### Scientific title

EFFECTS OF GRASTON INSTRUMENT SOFT TISSUE MOBILIZATION IN PATIENTS WITH SCIATIC NERVE ENTRAPMENT

##### Public title

EFFECTS OF GRASTON INSTRUMENT SOFT TISSUE MOBILIZATION IN PATIENTS WITH SCIATIC NERVE ENTRAPMENT

##### Purpose

Treatment

RCR&AHS/REC/MS-OMPT/S19/004

## Inclusion/Exclusion criteria

### Inclusion criteria:

Onset of radicular low back pain of less than 12 weeks.  
Pain upon active SLR in 30-70°. Sensitivity: 0.67(11)  
Specificity: 0.26 (12) Age group in range of 30-60 years.  
Male only. Sciatic nerve entrapment diagnosed on MRI.

### Exclusion criteria:

Spinal Fracture. Spinal tumor or any malignancy.  
Psychiatric Disorder. History of Osteoporosis.  
Rheumatologic disorders. Pain beyond 70° or below 30° on  
active SLR. Positive compression and distraction test of  
SI joint. Positive gaenslen's test Any red flags.

## Age

From **30 years** old to **60 years** old

## Gender

Male

## Phase

N/A

## Groups that have been masked

- Outcome assessor

## Sample size

Target sample size: **18**

## Randomization (investigator's opinion)

Randomized

## Randomization description

Patient will be recruited into Group A and Group B by  
lottery method (without replacement).

## Blinding (investigator's opinion)

Single blinded

## Blinding description

Single Blinded

## Placebo

Not used

## Assignment

Parallel

## Other design features

## Secondary Ids

empty

## Ethics committees

### 1

#### Ethics committee

##### Name of ethics committee

Riphah College of Rehabilitation and Allied Health  
Sciences

##### Street address

13-14-C-Civic centre , Near Hamdard Chowk,  
Township Lahore

##### City

Lahore

##### Postal code

54000

##### Approval date

2019-07-29, 1398/05/07

##### Ethics committee reference number

## Health conditions studied

### 1

#### Description of health condition studied

Sciatic Nerve Entrapment

#### ICD-10 code

M54.30

#### ICD-10 code description

Sciatica, unspecified side

## Primary outcomes

### 1

#### Description

Pain

#### Timepoint

Treatment will be given to both groups for 4 weeks, 3  
sessions per week and post treatment evaluation will be  
done after two weeks and follow up evaluation after one  
month by NPRS.

#### Method of measurement

Numeric Pain Rating Scale

### 2

#### Description

Functional Disability

#### Timepoint

Treatment will be given to both groups for 4 weeks, 3  
sessions per week and post treatment evaluation will be  
done after two weeks and follow up evaluation after one  
month by MODI.

#### Method of measurement

Modified Oswestry Disability Index

## Secondary outcomes

empty

## Intervention groups

### 1

#### Description

Intervention group A: Graston technique with help of  
graston instrument is applied (3 sessions per week for 4  
weeks)

#### Category

Treatment - Other

### 2

#### Description

Intervention group B: Graston technique along with  
lumber traction (Mechanical) and neural mobilization. (3  
sessions per week for 4 weeks)

#### Category

Treatment - Other

## Recruitment centers

1

### Recruitment center

**Name of recruitment center**

Fatima Memorial Hospital Shadman Lahore

**Full name of responsible person**

Dr Farhia Shah

**Street address**

Shadman Rd, Ichhra Lahore, Punjab 54000

**City**

Lahore

**Postal code**

54000

**Phone**

+92 42 35940444

**Email**

farhia@gmail.com

## Sponsors / Funding sources

1

### Sponsor

**Name of organization / entity**

Riphah International University QIE Campus

**Full name of responsible person**

Dr Syed Shakeel ur Rehman

**Street address**

13-14-C-Civic Centre, Near Hamdard Chowk, Township  
Lahore

**City**

Lahore

**Postal code**

54000

**Phone**

+92 42 35126110

**Fax****Email**

shakil.urrehman@riphah.edu.pk

**Grant name****Grant code / Reference number****Is the source of funding the same sponsor organization/entity?**

Yes

**Title of funding source**

Riphah International University QIE Campus

**Proportion provided by this source**

15

**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**

Riphah International University QIE Campus

**Full name of responsible person**

Muhammad Shahzad Qadree

**Position**

Student

**Latest degree**

Bachelor

**Other areas of specialty/work**

Physiotherapy

**Street address**

13-14-C-Civic Centre Near Hamdard Chowk Township  
Lahore

**City**

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**Province**

Punjab

**Postal code**

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**Email**

shhzdqadree@gmail.com

## Person responsible for scientific inquiries

### Contact

**Name of organization / entity**

Riphah International University QIE Campus

**Full name of responsible person**

Prof. Dr. Syed Shakeel ur Rehman

**Position**

Professor

**Latest degree**

Ph.D.

**Other areas of specialty/work**

Physiotherapy

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shakil.urrehman@riphah.edu.pk

## Person responsible for updating data

### Contact

**Name of organization / entity**

Riphah International University QIE Campus

**Full name of responsible person**

Muhammad Shahzad Qadree

**Position**

Student

**Latest degree**

Bachelor

**Other areas of specialty/work**

Physiotherapy

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**Email**

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

Undecided - It is not yet known if there will be 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**

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

**Informed Consent Form**

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

**Clinical Study Report**

Undecided - It is not yet known if there will be 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