

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

10 Jun 2026

### The Effect of Sustained Natural Apophyseal Glide with and Without Neurodynamics in the Management of Patient with Cervical Radiculopathy

#### Protocol summary

##### Study aim

- To identify the Effect of Sustained Natural Apophyseal Glide With And Without Neurodynamics In The Management Of Patient With Cervical Radiculopathy.

##### Design

Interventional study Randomized Clinical Trial Non probability convenience sampling technique

##### Settings and conduct

Sample size will be 44 individuals (22 each group)  
Conducted in time duration of 6 months

##### Participants/Inclusion and exclusion criteria

Inclusion Criteria 1. Patients having Age 22-40 years 2. Both genders 3. Patient availability and cooperation during treatment 4. Patients with positive result of following tests: Spurling test, ULNT-1, neck distraction and ipsilateral cervical rotation test. Exclusion Criteria 1. Patients having negative one of the following tests: Spurling test, ULNT-1, neck distraction and ipsilateral cervical rotation test. 2. Patients with accessory Systemic Musculoskeletal Dysfunction 3. Patients having symptoms of Vertebral Artery Insufficiency. 4. Patients not willing to participate or to follow up treatment plan.

##### Intervention groups

There will be two groups of equal number of individuals diagnosed with cervical radiculopathy after confirmation of Manual tests. Group A Control group will receive Sustained Natural Apophyseal Glide only. Patients in this group will receive a baseline treatment that is heating pad for 15 minutes before the treatment. Group B. This group will receive Sustained Natural Apophyseal Glide along with Neurodynamics. Patients in this group will receive a baseline treatment that is heating pad for 15 minutes before the treatment.

##### Main outcome variables

Correcting Cervical Radiculopathy

#### General information

##### Reason for update

##### Acronym

##### IRCT registration information

IRCT registration number: **IRCT20191023045218N1**

Registration date: **2020-01-04, 1398/10/14**

Registration timing: **prospective**

Last update: **2020-01-04, 1398/10/14**

Update count: **0**

##### Registration date

2020-01-04, 1398/10/14

##### Registrant information

##### Name

Shehnila Shoukat

##### Name of organization / entity

Riphah international University

##### Country

Pakistan

##### Phone

+92 454 710161

##### Email address

shehnila.499@gmail.com

##### Recruitment status

**Not yet recruiting**

##### Funding source

##### Expected recruitment start date

2640-09-23, 2019/07/01

##### Expected recruitment end date

2640-11-22, 2019/09/01

##### Actual recruitment start date

empty

##### Actual recruitment end date

empty

##### Trial completion date

empty

### Scientific title

The Effect of Sustained Natural Apophyseal Glide with and Without Neurodynamics in the Management of Patient with Cervical Radiculopathy

### Public title

Management of Patient with Cervical Radiculopathy

### Purpose

Treatment

### Inclusion/Exclusion criteria

#### Inclusion criteria:

Patients having Age 22-40 years Both genders Patients with positive result of following tests:Spurling test,ULNT-1,neck distraction and ipsilateral cervical rotation test. Patient availability and cooperation during treatment

#### Exclusion criteria:

Patients having negative one of the following tests:Spurling test,ULNT-1,neck distraction and ipsilateral cervical rotation test. Patients with accessory Systemic Musculoskeletal Dysfunction Patients having symptoms of Vertebral Artery Insufficiency. Patients not willing to participate or to follow up treatment plan.

### Age

From **22 years** old to **40 years** old

### Gender

Both

### Phase

1

### Groups that have been masked

- Outcome assessor

### Sample size

Target sample size: **44**

### Randomization (investigator's opinion)

Randomized

### Randomization description

Simple method, individual unit of randomization, table of random numbers, allocation with concealment, Non-Probability Convenience Sampling

### Blinding (investigator's opinion)

Single blinded

### Blinding description

Patients were blinded as they don't know their respected group, therapist who gave treatment and assess the outcome was blinded.

### Placebo

Not used

### Assignment

Parallel

### Other design features

44 number of individuals divided in 2 equal groups of 22 individuals.

### Secondary Ids

empty

## Ethics committees

### 1

#### Ethics committee

##### Name of ethics committee

Ethic Committee of Riphah college of Rehabilitation Sciences

##### Street address

House No.4292,Street No.2,MohaAllah Ali Pura Khushab

##### City

Khushab

##### Postal code

41000

##### Approval date

2640-09-29, 2019/07/07

##### Ethics committee reference number

RCRS-RE-MS-OMPT/Spring 19/023

## Health conditions studied

### 1

#### Description of health condition studied

Cervical radiculopathy (CR) is a pathological condition of the cervical nerve root (CNR) that may lead to chronic pain and disability.Cervical radiculopathy is known to be a neurological problem with its associated symptoms like pain, numbness, muscle weakness and diminished reflexes in one or both upper extremities and if prolongs these symptoms lead to headache, functional impairment, activity limitation and difficulty to return to work. Other leading causes of CR are cervical disc hernia ion with and without formation of spur and cervical spondylosis accompanied by inflammation and nerve compression due to dehydration and eventually collapsing of cervical discs.

#### ICD-10 code

M50.10

#### ICD-10 code description

Cervical disc disorder with radiculopathy, unspecified cervical region

## Primary outcomes

### 1

#### Description

Correcting Cervical Radiculopathy

#### Timepoint

6 months

#### Method of measurement

Data collection tools

## Secondary outcomes

empty

## Intervention groups

## 1

### Description

Control group: Control group will receive Sustained Natural Apophyseal Glide only. Patients in this group will receive a baseline treatment that is heating pad for 15 minutes before the treatment.

### Category

Rehabilitation

## 2

### Description

Intervention group: This group will receive Sustained Natural Apophyseal Glide along with Neurodynamics. Patients in this group will receive a baseline treatment that is heating pad for 15 minutes before the treatment.

### Category

Rehabilitation

## Recruitment centers

### 1

#### Recruitment center

##### Name of recruitment center

Tehsil Headquarter (THQ) hospital khushab

##### Full name of responsible person

Shehnila shoukat

##### Street address

House No.4292,Street No.2,MohaAllah Ali Pura  
Khushab

##### City

Khushab

##### Postal code

41000

##### Phone

+92 454 710161

##### Email

Shehnila.499@gmail.com

## Sponsors / Funding sources

### 1

#### Sponsor

##### Name of organization / entity

Riphah international University

##### Full name of responsible person

Shehnila Shoukat

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##### Grant name

#### Grant code / Reference number

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

No

#### Title of funding source

Self

#### 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

Other

## Person responsible for general inquiries

#### Contact

##### Name of organization / entity

Riphah international University

##### Full name of responsible person

Shehnila Shoukat

##### Position

Student

##### Latest degree

Master

##### Other areas of specialty/work

Physiotherapy

##### Street address

House No.4292,Street No.2,MohaAllah Ali Pura  
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##### Province

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## Person responsible for scientific inquiries

#### Contact

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

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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**

Not applicable

**Data Dictionary**

Yes - There is a plan to make this available

**Title and more details about the data/document**The Effect of Sustained Natural Apophyseal Glide with  
and Without Neurodynamics in the Management of  
Patient with Cervical Radiculopathy**When the data will become available and for how long**

Within 2 months

**To whom data/document is available**

Online

**Under which criteria data/document could be used**

By email

**From where data/document is obtainable**

Tehsil Headquarter (THQ) hospital Khushab

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

E mail

**Comments**