

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

10 Jun 2026

### Effects of Cyriax Manual Therapy Versus Mulligan Technique on clinical and functional outcomes in Patients with Lateral Epicondylitis

#### Protocol summary

##### Study aim

To compare the effects of Cyriax Manual Therapy versus Mulligan Technique on Clinical and Functional Outcomes in patient with Lateral Epicondylitis.

##### Design

Parallel group, double blinded, randomized controlled trial

##### Settings and conduct

The study would be double blinded as the participant and assessors of the study would be kept blind of the treatment group to which the patient will be allocated. The data will be collected from Physiotherapy Department, Gosha E Shifa Hospital, Lahore

##### Participants/Inclusion and exclusion criteria

Inclusion criteria: A Diagnosed Male and Female cases referred from Gosha E Shifa Hospital having age of 20 to 50 year are included in this study. Exclusion Criteria: the patient having any surgery or trauma of Elbow, Steroid injection for lateral epicondylitis, any Skin hypersensitivity or any Congenital deformity, Any Infection like Osteomyelitis, Ulcers, open wound or pathology of Shoulder Joint will be excluded.

##### Intervention groups

Group A participant will receive routine physical therapy as 10 minute TENS, 10 minute strengthening exercise of Extensor carpi longus,, 10 minute deep Friction Massage and Mill's manipulation. Group B will receive Movement with Mobilization will applied on elbow in supine position, shoulder positioned as internal rotation, forearm pronation and elbow extension with 10 repetitions for 6 seconds with 15 seconds duration of rest, with routine physical therapy as 10 minute TENS, 10 minute strengthening exercise of Extensor carpi longus.

##### Main outcome variables

pain intensity, hand grip and functional activity

#### General information

##### Reason for update

##### Acronym

Nida Akbar Rajput

##### IRCT registration information

IRCT registration number: **IRCT20200608047698N1**

Registration date: **2020-07-21, 1399/04/31**

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

Last update: **2020-07-21, 1399/04/31**

Update count: **0**

##### Registration date

2020-07-21, 1399/04/31

##### Registrant information

###### Name

Nida Akbar

###### Name of organization / entity

University of Lahore

###### Country

Pakistan

###### Phone

+92 233 837764

###### Email address

rajputnida75@gmail.com

##### Recruitment status

**Recruitment complete**

##### Funding source

##### Expected recruitment start date

2020-03-15, 1398/12/25

##### Expected recruitment end date

2020-09-15, 1399/06/25

##### Actual recruitment start date

empty

##### Actual recruitment end date

empty

##### Trial completion date

empty

##### Scientific title

Effects of Cyriax Manual Therapy Versus Mulligan

Technique on clinical and functional outcomes in Patients with Lateral Epicondylitis

## Public title

Lateral Epicondylitis

## Purpose

Treatment

## Inclusion/Exclusion criteria

### Inclusion criteria:

Diagnosed cases of Lateral Epicondylitis referred from Goshia E Shifa Hospital included Either genders minimum 20 years and maximum 50 year age

### Exclusion criteria:

History of Any surgery/trauma of Elbow Steroid injection for lateral epicondylitis Skin hypersensitivity Any systematic disease like Rheumatoid arthritis, SLE Any Infection like Osteomyelitis, Ulcers, open wound Any Congenital deformity or pathology of Shoulder Joint

## Age

From **20 years** old to **50 years** old

## Gender

Both

## Phase

N/A

## Groups that have been masked

- Participant
- Outcome assessor

## Sample size

Target sample size: **66**

## Randomization (investigator's opinion)

Randomized

## Randomization description

The patient having Diagnosed lateral epicondylitis will be recruited in the study by convenient sampling Technique

## Blinding (investigator's opinion)

Double blinded

## Blinding description

This will be double blind study as the assessor and participant will not be disclosed about the study group. The data will be collected by assessor and will be provided to the researcher.

## Placebo

Not used

## Assignment

Parallel

## Other design features

## Secondary Ids

empty

## Ethics committees

### 1

#### Ethics committee

##### Name of ethics committee

Ethics Committee of The University of Lahore  
"Institutional Review Board"

##### Street address

defence road campus,new campus ,The University of

Lahore

## City

lahore

## Postal code

54000

## Approval date

2020-03-06, 1398/12/16

## Ethics committee reference number

IRB-UOL-FAHS/716-I/2020

## Health conditions studied

### 1

#### Description of health condition studied

Lateral Epicondylitis

#### ICD-10 code

M77.1

#### ICD-10 code description

Lateral epicondylitis

## Primary outcomes

### 1

#### Description

pain Intensity

#### Timepoint

before intervention and then on 4th week and 8th week

#### Method of measurement

Numeric Pain Rating Scale

### 2

#### Description

Grip strenght

#### Timepoint

before intervention and then on 4th week and 8th week

#### Method of measurement

Dynamometer

### 3

#### Description

Activities of daily living

#### Timepoint

before intervention and then on 4th week and 8th week

#### Method of measurement

Patient Rated Tennis Elbow Evaluation

## Secondary outcomes

empty

## Intervention groups

### 1

#### Description

In group A participant will receive routine physical therapy. Patient will recieve TENS Therapy for 10 minute, Afterward strengthening of Extensor carpi longus for 10

minutes, In the last patient will receive Cyriax Techniques as Deep Friction Massage and Mill's manipulation

**Category**

Rehabilitation

**2**

**Description**

Group B patient will receive Movement with Mobilization applied on elbow in supine position, shoulder positioned as internal rotation, forearm pronation and elbow extension with 10 repetitions for 6 seconds with 15 seconds duration of rest, While receive routine physical therapy as 10 minute TENS, 10 minute strengthening exercise of Extensor carpi longus for last 10 minute.

**Category**

Rehabilitation

**Recruitment centers**

**1**

**Recruitment center**

**Name of recruitment center**

The Physiotherapy Department, Goshia E Shifa Hospital, Lahore

**Full name of responsible person**

Mudassir Yaseen

**Street address**

759-A Block, Gulshan Ravi, Lahore

**City**

lahore

**Postal code**

0544

**Phone**

+92 42 37812194

**Email**

mudassaryasinpt@gmail.com

**Web page address**

http://www.grwtrust.org/

**Sponsors / Funding sources**

**1**

**Sponsor**

**Name of organization / entity**

The University of Lahore

**Full name of responsible person**

Dr Waqar Afzal PT

**Street address**

defence road Lahore

**City**

lahore

**Postal code**

54000

**Phone**

+92 51 4486422

**Fax**

+92 51 4486422

**Email**

waqarafazal621@gmail.com

**Web page address**

https://www.uol.www.uol.edu.pk

**Grant name**

student

**Grant code / Reference number**

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

No

**Title of funding source**

Academic support Only

**Proportion provided by this source**

20

**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**

The University of Lahore

**Full name of responsible person**

Nida Akbar

**Position**

lecturer/physiotherapist

**Latest degree**

Master

**Other areas of specialty/work**

Physiotherapy

**Street address**

759-A Block, Gulshan Ravi, Lahore

**City**

lahore

**Province**

punjab

**Postal code**

0544

**Phone**

+92 331 3837764

**Fax**

**Email**

rajputnida75@gmail.com

**Web page address**

http://gswtrust.org/

**Person responsible for scientific inquiries**

**Contact**

**Name of organization / entity**

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**Full name of responsible person**

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**Web page address**

**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**

Not applicable

**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

**Title and more details about the data/document**

Effects of Cyriax Manual Therapy versus Mulligan Technique on Clinical and Functional Outcomes in Patients with Lateral Epicondylitis

**When the data will become available and for how long**

after publication

**To whom data/document is available**

people working in academic institutes

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

under the usage with terms in which journal is accessed /processed for publication

**From where data/document is obtainable**

Through email to Investigator rajputnida75@gmail.com

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

It will be only used in confidential way for improving research and benefit of humanity can provide on request through email to Investigator rajputnida75@gmail.com

**Comments**

data can be provided on request