

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

10 Jun 2026

### Effects of trigger point dry needling among patients with anterior knee pain

#### Protocol summary

##### Study aim

To check the dry needling effect to release the muscular trigger point treatment

##### Design

One-Group Posttest Only Design of Quasi Experimental study.

##### Settings and conduct

A total of 30 patient's age between 20-45 years visiting the physical therapy department of Hospitals and Clinics of Rawalpindi and Islamabad

##### Participants/Inclusion and exclusion criteria

Inclusion: Male with age between 20 to 45 years. Subjects having Anterior knee pain. Subjects with myofascial trigger points in quadriceps muscle.  
Exclusion: Patients taking anticoagulant medications  
Patients with meniscal tears, patellar tendinopathy, Ligamentous Injury. Patients with knee osteoarthritis. Patients with lumbosacral nerve root or peripheral nerve involvement. Patients having a history of prior knee surgery. Patients who had received acupuncture, Dry needling or Injection for knee pain during the past 6 Months

##### Intervention groups

After taking informed consent from patient and wearing gloves and appropriate personal protective measures, a thin filiform needle will be inserted which will penetrate into the skin and stimulate underlying myofascial trigger points.

##### Main outcome variables

The aim of this study is to evaluate the effects of trigger point dry needling of quadriceps muscle in reducing anterior knee pain Furthermore to determine the effects of dry needling in increasing range of motion of quadriceps muscle

#### General information

##### Reason for update

##### Acronym

#### IRCT registration information

IRCT registration number: **IRCT20220804055615N3**

Registration date: **2023-03-19, 1401/12/28**

Registration timing: **prospective**

Last update: **2023-03-19, 1401/12/28**

Update count: **0**

#### Registration date

2023-03-19, 1401/12/28

#### Registrant information

##### Name

Mohabbat Ali

##### Name of organization / entity

Memon Medical Intitute Hospital

##### Country

Pakistan

##### Phone

+92 21 99261810

##### Email address

ramal\_209@yahoo.com

#### Recruitment status

**Recruitment complete**

#### Funding source

#### Expected recruitment start date

2023-03-27, 1402/01/07

#### Expected recruitment end date

2023-04-15, 1402/01/26

#### Actual recruitment start date

empty

#### Actual recruitment end date

empty

#### Trial completion date

empty

#### Scientific title

Effects of trigger point dry needling among patients with anterior knee pain

**Public title**

Effects of trigger point dry needling among patients with anterior knee pain

**Purpose**

Treatment

**Inclusion/Exclusion criteria****Inclusion criteria:**

Male with age between 20 to 45 years Subjects having anterior knee pain Subjects with myofascial trigger points in quadriceps muscle

**Exclusion criteria:**

Patients taking anticoagulant medications Patients with meniscal tears, patellar tendinopathy , ligamentous injury Patients with knee osteoarthritis Patients with lumbosacral nerve root or peripheral nerve involvement Patients having a history of prior knee surgery Patients who had received acupuncture, dry needling or injection for knee pain during the past 6 months

**Age**

From **20 years** old to **45 years** old

**Gender**

Male

**Phase**

1

**Groups that have been masked**

*No information*

**Sample size**

Target sample size: **30**

**Randomization (investigator's opinion)**

Not randomized

**Randomization description****Blinding (investigator's opinion)**

Not blinded

**Blinding description****Placebo**

Not used

**Assignment**

Single

**Other design features**

physical therapist will collect the data and participants will age between 20-45 years

**Secondary Ids**

empty

**Ethics committees****1****Ethics committee****Name of ethics committee**

Ethics committee of Isra University Islamabad

**Street address**

Gulzar Quaid

**City**

Islamabad, Rawalpindi

**Postal code**

46000

**Approval date**

2021-10-15, 1400/07/23

**Ethics committee reference number**

F.1/IUIC-IIRS/ASRC/2021

**Health conditions studied****1****Description of health condition studied**

Anterior knee pain

**ICD-10 code**

M25.569

**ICD-10 code description**

ICD-10 code M25. 569 for Pain in unspecified knee is a medical classification as listed by WHO under the range - Arthropathies

**Primary outcomes****1****Description**

To treat the anterior knee pain

**Timepoint**

Before intervention and after 3 week of intervention

**Method of measurement**

Kujala scoring questionair and visual analog scale

**Secondary outcomes**

empty

**Intervention groups****1****Description**

Intervention group: After taking informed consent from patient and wearing gloves and appropriate personal protective measures, a thin filiform needle will be inserted which will penetrate into the skin and stimulate underlying myofascial trigger points. Data will be compared at baseline and after the intervention. The data will be collected through the following questionnaire/forms i-e Kujala scoring questionnaire

**Category**

Rehabilitation

**Recruitment centers****1****Recruitment center****Name of recruitment center**

Memon Medica Institute Hospital

**Full name of responsible person**

Mohabbat Ali

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Safoora Goth Scheme 33

**City**

Karachi

**Postal code**

75270

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mohabbat.ali@mhef.edu.pk  
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## Sponsors / Funding sources

### 1

#### Sponsor

**Name of organization / entity**  
Memon College of Physical and Rehasbilitaive  
Medicine  
**Full name of responsible person**  
Dr. Mohabbat Ali Principal of MCPRM  
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#### Grant name

Educational

#### Grant code / Reference number

research budget

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

Yes

#### Title of funding source

Memon College of Physical and Rehasbilitaive Medicine

#### 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**  
Memon Medical Institute Hospital  
**Full name of responsible person**  
Mohabbat Ali  
**Position**

Assistant Professor  
**Latest degree**  
Master  
**Other areas of specialty/work**  
Rehabilitation management  
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## Person responsible for scientific inquiries

#### Contact

**Name of organization / entity**  
Memon Medical Intitute Hospital  
**Full name of responsible person**  
Mohabbat Ali  
**Position**  
Assistant Professor /HOD  
**Latest degree**  
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Physical Therapy  
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## Person responsible for updating data

#### Contact

**Name of organization / entity**  
Memon Medical Institute Hospital  
**Full name of responsible person**  
Mohabbat Ali  
**Position**  
Assistant Professor

**Latest degree**

Master

**Other areas of specialty/work**

Rehabilitation management

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**Web page address**

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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**

All patients will see in OPD

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

it will take 6 month

**To whom data/document is available**

Only data collector and researcher

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

Data will analysis by SPSS and researcher will review the results

**From where data/document is obtainable**

Hospital out patients department

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

consent form will be signed before taking the data

**Comments**

this is quasi experimental study