

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

Street address

Safoora Goth Scheme 33

City

Karachi

Postal code

75270

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+92 21 99261810
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Web page address
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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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Full name of responsible person
Mohabbat Ali
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Assistant Professor /HOD
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Person responsible for updating data

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Latest degree

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Other areas of specialty/work

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Email

mohabbat.ali@mhef.edu.pk

Web page address

<https://mmi.edu.pk/>

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