Clinical Trial Protocol
Iranian Registry of Clinical Trials

09 Nov 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 myofasical 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 myofasical 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 questionnair 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
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75270

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Web page address
https://mmi.edu.pk/

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
Street address
Safoora
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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
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Full name of responsible person
Mohabbat Ali
Position
Assistant Professor /HOD
Latest degree
Master
Other areas of specialty/work
Physical Therapy
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Person responsible for updating data

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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