

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

10 Jun 2026

### Comparative effects of muscle energy technique versus kinesiotopeing on pain, mobility and kinesiophobia in information technology professionals with ergonomic related low back pain

#### Protocol summary

##### Study aim

To compare the effectiveness of muscle energy technique versus kinesiotopeing on mobility, pain kinesiophobia in information technology professionals with ergonomic related low back pain.

##### Design

A concealed, randomized, blinded, sham controlled clinical trial with a parallel group design of 30 patients enrolled.

##### Settings and conduct

• The University of Faisalabad • Superior University Faisalabad Campus

##### Participants/Inclusion and exclusion criteria

Both male and female patients of low back pain with the age of 20-40 years was selected after meeting the inclusion and exclusion criteria

##### Intervention groups

1: muscle energy technique 2: kinesiotopeing

##### Main outcome variables

Pain Mobility Kinesiophobia

#### General information

##### Reason for update

##### Acronym

##### IRCT registration information

IRCT registration number: **IRCT20240610062080N1**

Registration date: **2024-08-03, 1403/05/13**

Registration timing: **retrospective**

Last update: **2024-08-03, 1403/05/13**

Update count: **0**

##### Registration date

2024-08-03, 1403/05/13

##### Registrant information

Name

Sumbal Sohail

##### Name of organization / entity

The University of Faisalabad

##### Country

Pakistan

##### Phone

+92 41 2699533

##### Email address

2022-ms-pt-059@tuf.edu.pk

##### Recruitment status

**Recruitment complete**

##### Funding source

##### Expected recruitment start date

2024-03-01, 1402/12/11

##### Expected recruitment end date

2024-06-01, 1403/03/12

##### Actual recruitment start date

2024-03-01, 1402/12/11

##### Actual recruitment end date

2024-06-01, 1403/03/12

##### Trial completion date

2024-06-25, 1403/04/05

##### Scientific title

Comparative effects of muscle energy technique versus kinesiotopeing on pain, mobility and kinesiophobia in information technology professionals with ergonomic related low back pain

##### Public title

Comparative effects of muscle energy technique versus kinesiotopeing on pain, mobility and kinesiophobia in information technology professionals with ergonomic related low back pain

##### Purpose

Treatment

##### Inclusion/Exclusion criteria

**Inclusion criteria:**

Age 22 to 40 years Gender both male and female Pain score greater than 4 on VAS Experiencing WRLBP more than 90 days

**Exclusion criteria:**

H/O of spinal surgeries Fracture Cancer Spondylolisthesis Serious cardio-respiratory disease Spinal stenosis Neuropathic pain

**Age**

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

**Gender**

Both

**Phase**

N/A

**Groups that have been masked**

- Participant

**Sample size**

Target sample size: **30**

Actual sample size reached: **30**

**Randomization (investigator's opinion)**

Randomized

**Randomization description**

Method of randomization is simple. Participants were randomly divided into two groups named as group A and group B by lottery method.

**Blinding (investigator's opinion)**

Single blinded

**Blinding description**

when participants in the study do not know which group they have been allocated to, intervention or control

**Placebo**

Not used

**Assignment**

Parallel

**Other design features**

Randomized clinical Trial

**Secondary Ids**

empty

**Ethics committees**

1

**Ethics committee**

**Name of ethics committee**

The University of Faisalabad

**Street address**

Faisal Town, West Canal Road

**City**

Faisalabad

**Postal code**

38000

**Approval date**

2024-01-05, 1402/10/15

**Ethics committee reference number**

TUF/Addl Reg/SB/778

**Health conditions studied**

1

**Description of health condition studied**

Ergonomic related Low back pain

**ICD-10 code**

M54.5

**ICD-10 code description**

Low back pain

**Primary outcomes**

1

**Description**

The first outcome goal was Pain checked using the visual analog scale, an effective and accurate tool for measuring pain in patients with low back pain. The VAS is a 10-centimeter scale, with 0 showing no pain and 10 means severe pain.

**Timepoint**

Total 3 readings were taken during the whole treatment. First was taken before treatment as a baseline reading. Then second reading was taken by post 2 week. Same as third reading was noted after 4th week.

**Method of measurement**

By using Visual Analogue Scale

**Secondary outcomes**

1

**Description**

Mobility and kinesophobia

**Timepoint**

First reading was taken before treatment as a baseline reading. Then second reading was taken by post 2 week. Same as third reading was noted after 4th week. Total 3 readings were taken during the whole treatment.

**Method of measurement**

Mobility by schober test , Kinesophobia by TAMPA scale

**Intervention groups**

1

**Description**

15 participants in group A were treated by kinesio taping plus conventional physical therapy. Conventional physical therapy includes dry heat and lumbar stabilization exercises as a baseline treatment. All the participants in group A were taped by physicians. It was lasted for 4 days before it was replaced. Taping was applied 3 times (baseline 4th , 8th days). Patients were instructed to keep the tape on between taping sessions. This procedure consisting a total period of 12 days.

**Category**

Rehabilitation

## 2

### Description

Group B consisting of 15 participants were treated with muscle energy technique plus conventional physical therapy. Conventional physical therapy includes dry heat and lumbar stabilization exercises as a baseline treatment. Muscle energy technique was applied in the form of PIR on psoas group, hamstring, tensor fascia Lata, piriformis, quadratus lumborum and erector spinae muscles by holding 7-10s with 4 repetitions. The treatment of this group went for one month under 3 training / week. The readings for different outcome variables measured on 2nd and 4th week respectively.

### Category

Rehabilitation

## Recruitment centers

### 1

#### Recruitment center

**Name of recruitment center**

The University of Faisalabad

**Full name of responsible person**

Sumbal Sohail

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## Sponsors / Funding sources

### 1

#### Sponsor

**Name of organization / entity**

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**Full name of responsible person**

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**Email**

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**Grant name**

The University of Faisalabad

**Grant code / Reference number**

TUF/Addl Reg/SB/778

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

Yes

**Title of funding source**

The University of Faisalabad

**Proportion provided by this source**

100

**Public or private sector**

Private

**Domestic or foreign origin**

Domestic

**Category of foreign source of funding**

Sponsor: country of origin

**Country of origin**

PK

**Type of organization providing the funding**

Other

## Person responsible for general inquiries

#### Contact

**Name of organization / entity**

The University of Faisalabad

**Full name of responsible person**

Sumbal Sohail

**Position**

Consultant

**Latest degree**

Specialist

**Other areas of specialty/work**

Physiotherapy

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## Person responsible for scientific inquiries

#### Contact

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Mahvish Musharaf Randhawa

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## Person responsible for updating data

### Contact

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**Other areas of specialty/work**  
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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

Data will be provided by contacting on g mail.

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

Data will be provided by contacting on g mail.

### To whom data/document is available

Data will be provided by contacting on g mail.

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

Data will be provided by contacting on g mail.

### From where data/document is obtainable

Data will be provided by contacting on g mail.

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

Data will be provided by contacting on g mail.

### Comments

no comments