Clinical Trial Protocol
Iranian Registry of Clinical Trials

10 Jun 2026

Comparative effects of muscle energy technique versus kinesiotaping 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 kinesiotaping 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: kinesiotaping

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
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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 kinesiotaping on pain, mobility and kinesiophobia in information technology professionals with ergonomic related low back pain

Public title
Comparative effects of muscle energy technique versus kinesiotaping 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

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38000

Approval date

2024-01-05, 1402/10/15

Ethics committee reference number

TUF/AddI 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

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Sponsors / Funding sources

1

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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

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The University of Faisalabad
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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