

Clinical Trial Protocol

Iranian Registry of Clinical Trials

10 Jun 2026

Comparative analysis of efficacy of muscle energy technique and static stretching techniques in enhancing flexibility following burn contracture in elbow

Protocol summary

Study aim

The study will be conducted to investigate the best technique in increasing flexibility in post burn contractures in elbow joint

Design

This study will be a Randomized clinical trial with a sample size of 60 burn patients with contractures who had decreased muscle flexibility as a result of partial thickness burn. Data will be selected through convenient sampling from the Burn Unit Ward of Allied Hospital, Faisalabad. However, Informed consent will be taken from participants. Palpation, Visual analogue scale and goniometer will be used for pre and post-assessment. Sixty patients will be divided into two groups, thirty in each group. Group (1): received Muscle Energy Technique (MET), Group (2): received 20 sec of static stretching exercise. Measurements of elbow extension range of motion were conducted before treatment, post 5 days of treatment, and after 8 days of treatment.

Settings and conduct

Burn Unit Ward of Allied Hospital, Faisalabad

Participants/Inclusion and exclusion criteria

Inclusion criteria: Age 20-50 years Gender (both) 2nd degree deep and 3rd degree burns in elbow Patients with unilateral tight elbow flexors Superficial skin grafted individual Subjects not involved in any exercise activity at the start of the study Exclusion criteria: history of serious pathology (e.g. malignancy, inflammatory disorder, infection) history of cervical radiculopathy hand deformities fractured or dislocated elbow

Intervention groups

Sixty patients will be divided into two groups, thirty in each group. Group (1): received Muscle Energy Technique (MET), Group (2): received 20 sec of static stretching exercise.

Main outcome variables

Pain; Range of motion

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20220930056062N6**

Registration date: **2024-06-18, 1403/03/29**

Registration timing: **prospective**

Last update: **2024-06-18, 1403/03/29**

Update count: **0**

Registration date

2024-06-18, 1403/03/29

Registrant information

Name

Kaiynat Shafique

Name of organization / entity

The University of Faisalabad

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Pakistan

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+92 334 6925051

Email address

kaiynatshafique@yahoo.com

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2024-06-19, 1403/03/30

Expected recruitment end date

2024-07-29, 1403/05/08

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Comparative analysis of efficacy of muscle energy technique and static stretching techniques in enhancing flexibility following burn contracture in elbow

Public title

Efficacy of muscle energy technique and static stretching techniques in burn contractures of elbow

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria:

Age 20-50 years Gender (both) 2nd degree deep and 3rd degree burns in elbow Patients with unilateral tight elbow flexors Superficial skin grafted individual Subjects not involved in any exercise activity at the start of the study

Exclusion criteria:

History of serious pathology (e.g. malignancy, inflammatory disorder, infection) Fractured or dislocated elbow Hand deformities History of cervical radiculopathy

Age

From **20 years** old to **50 years** old

Gender

Both

Phase

N/A

Groups that have been masked

- Participant

Sample size

Target sample size: **60**

Randomization (investigator's opinion)

Randomized

Randomization description

Randomization through lottery method. Each participant will be asked to choose between two pieces of paper labeled "Group A" and "Group B." They will be assigned to treatment groups based on the paper they select.

Blinding (investigator's opinion)

Single blinded

Blinding description

Patients will be blind in this clinical trial

Placebo

Not used

Assignment

Other

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Government College University Faisalabad

Street address

Gulberg Faisalabad

City

Faisalabad

Postal code

38000

Approval date

2024-05-01, 1403/02/12

Ethics committee reference number

5715

Health conditions studied

1

Description of health condition studied

Contracture, elbow

ICD-10 code

M24.52

ICD-10 code description

Contracture, elbow

Primary outcomes

1

Description

Pain

Timepoint

Assessment will be conducted before treatment, post 5 days of treatment and after 8 days of treatment

Method of measurement

Visual analogue scale

2

Description

Range of motion

Timepoint

Assessment will be conducted before treatment, post 5 days of treatment and after 8 days of treatment

Method of measurement

goniometer

Secondary outcomes

empty

Intervention groups

1

Description

Intervention group 1: Muscle Energy Technique

Category

Rehabilitation

2

Description

Intervention group 2: Static Stretching

Category

Recruitment centers

1

Recruitment center

Name of recruitment center

Allied Hospital faisalabad

Full name of responsible person

Rafia Imtiaz

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Sponsors / Funding sources

1

Sponsor

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Grant name

Grant code / Reference number

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

No

Title of funding source

It is a self funded study. All financial expenses are bear personally

Proportion provided by this source

1

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

Persons

Person responsible for general inquiries

Contact

Name of organization / entity

Government College University Faisalabd

Full name of responsible person

Rafia Imtiaz

Position

Lecturer

Latest degree

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Other areas of specialty/work

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Sharing plan

Deidentified Individual Participant Data Set (IPD)

No - There is not a plan to make this available

Justification/reason for indecision/not sharing IPD

Privacy concerns

Study Protocol

Undecided - It is not yet known if there will be a plan to make this available

Statistical Analysis Plan

Undecided - It is not yet known if there will be a plan to make this available

Informed Consent Form

Yes - There is a plan to make this available

Clinical Study Report

Undecided - It is not yet known if there will be a plan to make this available

Analytic Code

Undecided - It is not yet known if there will be a plan to make this available

Data Dictionary

Undecided - It is not yet known if there will be a plan to make this available

Title and more details about the data/document

Comparative analysis of efficacy of muscle energy technique and static stretching techniques in enhancing flexibility following burn contracture in elbow

When the data will become available and for how long

Data from this trial will not be made publicly available. However, it may be accessible upon request. For inquiries regarding data access, please contact rafiaimtiaz@gcuf.edu.pk

To whom data/document is available

Data from this trial will not be made publicly available. However, it may be accessible upon request. For inquiries regarding data access, please contact rafiaimtiaz@gcuf.edu.pk.

Under which criteria data/document could be used

Data from this trial will not be made publicly available. However, it may be accessible upon request. For inquiries regarding data access, please contact rafiaimtiaz@gcuf.edu.pk.

From where data/document is obtainable

Data from this trial will not be made publicly available. However, it may be accessible upon request. For inquiries regarding data access, please contact rafiaimtiaz@gcuf.edu.pk.

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

Data from this trial will not be made publicly available. However, it may be accessible upon request. For inquiries regarding data access, please contact rafiaimtiaz@gcuf.edu.pk.

Comments