

Clinical Trial Protocol

Iranian Registry of Clinical Trials

10 Jun 2026

The effect of continuous Diathermy on pain and function of patients suffering from lateral epicondylitis

Protocol summary

Summary

Different types of physical modalities ranging from TENS to Ultrasound are used in the treatment of lateral epicondylitis (LE). Diathermy may increase vascular circulation and change tissue temperature causing proved pain relief in different musculoskeletal problems. There is little evidence to support the use of diathermy in the treatment of LE. In this double blind (patient, assessor), clinical randomized trial we aim to investigate the effect of 10 sessions of continuous diathermy application (15 minutes each session) in comparison to sham diathermy (on device without output). Subjects suffering from LE for more than 3 months, aged between 18 and 65, will be randomly allocated to 2 groups using sealed envelopes. Both groups will receive diathermy (real or sham) 3 days per week plus specific stretching and strengthening exercises. Pain (using visual analogue scale) and upper extremity function (using Quick DASH Disabilities of the Arm Shoulder and Hand) outcome measure) will be measured before and after treatment as well as in 2 months follow up.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT2016042321139N4**

Registration date: **2016-05-12, 1395/02/23**

Registration timing: **prospective**

Last update:

Update count: **0**

Registration date

2016-05-12, 1395/02/23

Registrant information

Name

Safoora Ebadi

Name of organization / entity

Iran University of Medical Sciences

Country

Iran (Islamic Republic of)

Phone

+98 912 175 7107

Email address

ebadi.s@iums.ac.ir

Recruitment status

Recruitment complete

Funding source

Vice chancellor for research, Iran University of Medical Sciences

Expected recruitment start date

2016-05-16, 1395/02/27

Expected recruitment end date

2016-09-01, 1395/06/11

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

The effect of continuous Diathermy on pain and function of patients suffering from lateral epicondylitis

Public title

The effect of Diathermy on Tennis elbow

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion: 1.having lateral epycondilitis for more than 3 months 2.no history of surgery in upper extremities or spine 3.no history of fracture in upper exterimities or spine 4.have not received physiotherapy during last 6 months 5.not pregnant 6.no obvious psychological problem or not using related medicine Exclusion: 1.not willing to continue 2.not being able to tolerate the

modality

Age

From **18 years** old to **65 years** old

Gender

Both

Phase

3

Groups that have been masked

No information

Sample size

Target sample size: **50**

Randomization (investigator's opinion)

Randomized

Randomization description

Blinding (investigator's opinion)

Double blinded

Blinding description

Placebo

Used

Assignment

Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Ethics committee of Iran University of Medical Sciences

Street address

Iran University of Medical Sciences ,Shahid Hemmat Highway .Tehran,1449614535,IRAN

City

Tehran

Postal code

Approval date

2015-09-23, 1394/07/01

Ethics committee reference number

IR.IUMS.REC 1394.8611215664

Health conditions studied

1

Description of health condition studied

Lateral epicondylitis

ICD-10 code

M77.1

ICD-10 code description

Lateral epicondylitis

Primary outcomes

1

Description

pain

Timepoint

befor starting traetment-after treatment-2 months followup

Method of measurement

visual analog scale

Secondary outcomes

1

Description

Function

Timepoint

befor starting traetment-after treatment-2 months followup

Method of measurement

Disability of Arm Shoulder and Hand questionnaire

Intervention groups

1

Description

intervention: continuous diathermy 15 minutes (increase intensity until patient feels mild warmth) + stretching and strengthening exercise for upper extremity

Category

Rehabilitation

2

Description

control: sham diathermy (the device is on and positioned the same way as in intervention group with no out put for 15 minutes) + stretching and strengthening exercise for upper extremity exercise

Category

Rehabilitation

Recruitment centers

1

Recruitment center

Name of recruitment center

Firouzgar Hospital

Full name of responsible person

Dr. Safoora Ebadi

Street address

Physical Medicine and Rehabilitation Department, Firouzgar Hospital, Behafarin St., Karim khane zand St.

City

Tehran

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Vice chancellor for research, Iran University of Medical Sciences

Full name of responsible person

Dr. Javad Ali Musavi

Street address

Iran University of Medical Sciences ,Shahid Hemmat Highway

City

Tehran

Grant name**Grant code / Reference number****Is the source of funding the same sponsor organization/entity?**

Yes

Title of funding source

Vice chancellor for research, Iran University of Medical Sciences

Proportion provided by this source

100

Public or private sector

empty

Domestic or foreign origin

empty

Category of foreign source of funding

empty

Country of origin**Type of organization providing the funding**

empty

Person responsible for general inquiries

Contact**Name of organization / entity**

Iran University of Medical Sciences; Faculty of Medicine

Full name of responsible person

Dr. Safoora Ebadi

Position

Assistant Professor

Other areas of specialty/work**Street address**

Physical Medicine and Rehabilitation Department, Firouzgar Hospital, Behafarin St., Karim khane zand St.

City

Tehran

Postal code**Phone**

+98 21 8214 1229

Fax**Email**

ebadi.s@iums.ac.ir

Web page address

Person responsible for scientific inquiries

Contact**Name of organization / entity**

Iran University of Medical sciences, Faculty of Medicine

Full name of responsible person

Dr. Safoora Ebadi

Position

Assistant professor, PhD Pt

Other areas of specialty/work**Street address**

Physical Medicine and Rehabilitation Department, Firouzgar Hospital, Behafarin St., Karim khane zand St.

City

Tehran

Postal code**Phone**

+98 21 8214 1229

Fax**Email**

ebadi.s@iums.ac.ir

Web page address

Person responsible for updating data

Contact**Name of organization / entity**

Iran University of Medical sciences

Full name of responsible person

Dr. Safoora Ebadi

Position

Assistant professor, PhD pt

Other areas of specialty/work**Street address**

Physical Medicine and Rehabilitation Department, Firouzgar Hospital, Behafarin St., Karim khane zand St.

City

Tehran

Postal code

00982182141229

Phone

+98 21 8214 1229

Fax**Email**

ebadi.s@iums.ac.ir

Web page address

Sharing plan

Deidentified Individual Participant Data Set (IPD)

empty

Study Protocol

empty

Statistical Analysis Plan

empty

Informed Consent Form

empty

Clinical Study Report

empty

Analytic Code

empty

Data Dictionary

empty