

Clinical Trial Protocol

Iranian Registry of Clinical Trials

18 Sep 2026

Comparison of electroacupuncture and low level laser on treatment of frozen shoulder

Protocol summary

Summary

The aim of this research is comparing the effect of electroacupuncture and low-level laser on the treatment of frozen shoulder. This study is a double-blind clinical trial because both of patient and assessor are not aware of the kind of treatment methods but the therapist is aware of the treatment methods. Seventy-five patients will refer to the Fattemieh physiotherapy clinic in Rafsanjan. Assessor evaluates the patients based on inclusion criteria, then he divides them to random permuted blocks methods in 3 equal groups and refers to the therapist. Three interventions of this study are electroacupuncture (acupuncture with electricity), low-level laser (Gallium, Aluminum-Arsenide, 810nm, 100mv) and conventional therapy (Ultrasound, Infrared, Transcutaneous Electrical Nerve Stimulation (TENS)). The intensity of pain and movements will be assessed during 1st, 5th, 10th sessions and one month later. Inclusion criteria are having 45-65 years; having limitation of flexing, abduction, lateral and medial rotation of the shoulder movements; pain in active and resistive movements; time of affected to shoulder pain has been previous 3 months; frozen shoulder should be primary kind. Exclusion criteria are having previous surgery and fracture; corticosteroid injection and physiotherapy during 6 months ago; rupture of the rotator cuff; pregnancy and secondary frozen shoulder.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT201706163220N8**
Registration date: **2017-07-24, 1396/05/02**
Registration timing: **registered_while_recruiting**

Last update:

Update count: **0**

Registration date

2017-07-24, 1396/05/02

Registrant information

Name

Dadollah Shahimoridi

Name of organization / entity

Rafsanjan University of Medical Sciences

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d_shahimoridi@rums.ac.ir

Recruitment status

Recruitment complete

Funding source

Rafsanjan University of Medical Sciences

Expected recruitment start date

2017-06-06, 1396/03/16

Expected recruitment end date

2018-04-05, 1397/01/16

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Comparison of electroacupuncture and low level laser on treatment of frozen shoulder

Public title

The Effect of electroacupuncture and laser on frozen shoulder

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria: aged 45 to 65 years; having limitation

of flexion, abduction, lateral and medial rotation of the shoulder movements; pain at active and resistive movements; duration of disease at least 3 months; frozen shoulder of primary type; Exclusion criteria: having previous surgery and fracture of the shoulder; corticosteroid injection and physiotherapy during past 6 months; rupture of the rotator cuff; pregnancy; secondary frozen shoulder due to other diseases

Age

From **45 years** old to **65 years** old

Gender

Both

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: **75**

Randomization (investigator's opinion)

Randomized

Randomization description

Blinding (investigator's opinion)

Double blinded

Blinding description

Placebo

Not used

Assignment

Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

The ethics committee of Rafsanjan University of Medical Sciences

Street address

Central Organization of Rafsanjan University of medical Sciences, Emam Ali Blvd.

City

Rafsanjan

Postal code

7717893591

Approval date

2017-06-18, 1396/03/28

Ethics committee reference number

IR.RUMS.REC.1396.65

Health conditions studied

1

Description of health condition studied

Frozen shoulder

ICD-10 code

M75.0

ICD-10 code description

Adhesive capsulitis of shoulder

Primary outcomes

1

Description

Pain intensity

Timepoint

1st, 5th, 10th sessions and one month later

Method of measurement

By Visual Analogue Scale (VAS)

2

Description

Shoulder movements

Timepoint

1st, 5th, 10th sessions and one month later

Method of measurement

By goniometer

Secondary outcomes

empty

Intervention groups

1

Description

First group will receive electroacupuncture. Needle is inserted to acupuncture points of shoulder, then electrical stimulation through simulator set connect to patients body, Ying Di, KWD 808 model, made in china, 3HZ and 20 minutes.

Category

Rehabilitation

2

Description

Second group will receive low level laser (Ga Al AS, 810 nm, 100 mv) 6J intensity and 10 minutes per session during 10 session on 9 acupuncture points of the frozen shoulder.

Category

Rehabilitation

3

Description

Third group (conventional physiotherapy) are include Ultrasound, Infrared and TENS sets.

Category

Rehabilitation

Recruitment centers

1

Recruitment center

Name of recruitment center

Fattemieh Physiotherapy Clinic

Full name of responsible person

Dadollah Shahimoridi

Street address

Alley 17, Moalem St.

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Rafsanjan

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Rafsanjan University of Medical Sciences

Full name of responsible person

Hamid Hakimi

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Educational assistant Central Organization of
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Rafsanjan

Grant name

Grant code / Reference number

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

Yes

Title of funding source

Rafsanjan 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

Rafsanjan University of Medical Sciences

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Position

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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