

Clinical Trial Protocol

Iranian Registry of Clinical Trials

23 Jun 2026

Evaluation and comparison of two therapeutic physiotherapy protocols of high power or low power lasers combined with kinesio taping on shoulder function and musculoskeletal sonography parameters in patients with subacromial impingement syndrome

Protocol summary

Pain, shoulder function, sonography parameters of subacromial space

Study aim

Evaluation and comparison of two therapeutic physiotherapy protocols of high power or low power lasers combined with kinesio taping on shoulder function and musculoskeletal sonography parameters in patients with subacromial impingement syndrome

Design

Clinical Trial , randomised with concealed envelope and with control group There are three groups, and 10 in each group are calculated based on previous studies

Settings and conduct

The intervention will be three sessions per week and seven sessions Assessment is performed before and after treatment There are two treatment groups and one control group. Patients are not aware of the type of intervention

Participants/Inclusion and exclusion criteria

Women and men with subacromial impingement syndrome 40-60 years old Right shoulder pain , BMI 25-30 Stage I , II in Neer classification The presence of tendonitis and inflammation in the MRI that is being examined by a doctor Painful arch 40-120 of shoulder abduction Positive Neer , Hawkins-kennedy and Yocum tests VAS 4-8 exclusion criteria: presence of : pregnancy , shoulder surgery , GH joint dislocation , corticosteroid or heyaloronic acid injection presence of : frozen shoulder , Acromioclavicular joint arthritis , Rottator cuff rupture , shoulder instability osteoprosis Distracting the neck and changing the symptoms with neck movements Use anti-inflammatory and anti-inflammatory drugs since the onset of evaluation and participation in the study Unwillingness to continue treatment for any reason

Intervention groups

High power laser group. Low power laser group, control group In all three groups, Kinesiotape will be used

Main outcome variables

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20180406039203N1**

Registration date: **2018-06-03, 1397/03/13**

Registration timing: **prospective**

Last update: **2020-01-14, 1398/10/24**

Update count: **1**

Registration date

2018-06-03, 1397/03/13

Registrant information

Name

Zohre Zaki

Name of organization / entity

Tarbiat modares university

Country

Iran (Islamic Republic of)

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zohre_zaki@modares.ac.ir

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2018-05-21, 1397/02/31

Expected recruitment end date

2018-10-21, 1397/07/29

Actual recruitment start date

2018-06-08, 1397/03/18

Actual recruitment end date

2018-11-06, 1397/08/15

Trial completion date

2018-11-22, 1397/09/01

Scientific title

Evaluation and comparison of two therapeutic physiotherapy protocols of high power or low power lasers combined with kinesio taping on shoulder function and musculoskeletal sonography parameters in patients with subacromial impingement syndrome

Public title

Evaluation of high power and low power laser with tape and in shoulder impingement

Purpose

Treatment

Inclusion/Exclusion criteria**Inclusion criteria:**

BMI 25-30 , Right shoulder pain Stage I,II in Neer Classification The presence of tendonitis and inflammation in the MRI that is being examined by a doctor Painful arch 40-120 of shoulder abduction Positive Yocum , Neer and Hawkins - kennedy tests Weakness or pain in resistance external rotation , internal rotation and abduction VAS 4-8

Exclusion criteria:

Presence : pregnancy , shoulder surgery , G.H joint dislocation , corticostroid and heyaloronic acid injection from 6 month befor Presence: Frozen shoulder , Acromioclavicular joint arthritis , Rottator cuff ruptur , shoulder instability Tscore lower than -2 Radicular pain Use anti-inflammatory and drugs since the onset of evaluation and participation in the study Unwillingness to continue treatment for any reason

Age

From **40 years** old to **60 years** old

Gender

Both

Phase

N/A

Groups that have been masked

- Participant

Sample size

Target sample size: **37**

Actual sample size reached: **40**

Randomization (investigator's opinion)

Randomized

Randomization description

Simple and individual randomization will be done through sealed envelopes

Blinding (investigator's opinion)

Single blinded

Blinding description

Individuals participating in the study are blind to what kind of laser they receive or are in the control group

Placebo

Used

Assignment

Parallel

Other design features

Precise assessment of changes before and after treatment with ultrasound

Secondary Ids

empty

Ethics committees**1****Ethics committee****Name of ethics committee**

National Ethics Committee for Biomedical Research

Street address

Jala al ahmad street , Tarbiat modares university

City

Tehran

Province

Tehran

Postal code

14115-111

Approval date

2018-05-28, 1397/03/07

Ethics committee reference number

IR.MODARES.REC.1397.005

Health conditions studied**1****Description of health condition studied**

Subacromial impingement syndrome

ICD-10 code

M75.41

ICD-10 code description

Impingement syndrome of right shoulder

Primary outcomes**1****Description**

Pain

Timepoint

Before and after treatment

Method of measurement

Visual analogue scale

Secondary outcomes**1****Description**

Range of motion

Timepoint

Before and after treatment

Method of measurement

Goniometer

Intervention groups

1

Description

Intervention group: A high power laser with a power of 4 watts for 9 minutes will be used on a sub-acromioclavicular space of 10 centimeters in area, and the total energy received will be 2050 jul. Per square centimeter. Treatment will be performed three times a week for seven sessions

Category

Treatment - Devices

2

Description

Intervention group: A low power laser with a power of 200 MW for 16 minutes will be used on a sub-acromioclavicular space of 10 cm². The total energy received will be 200 jules per square centimeter. Treatment is performed three times a week for seven sessions.

Category

Treatment - Devices

3

Description

Control group: A placebo laser will be given for 10 minutes. The patient's position and therapist will be treated in the same way as the treatment group. The device is switched on and the radiation does not start

Category

Treatment - Devices

Recruitment centers

1

Recruitment center

Name of recruitment center

Dr.ravanbod physiotherapy clinic

Full name of responsible person

Roya Ravanbod

Street address

Number4 ,Tarabande alley , Valiasr street

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3153894139

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Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Tarbiat modares university

Full name of responsible person

Roya Ravanbod

Street address

Jalal Ale Ahmad street , Tarbiat modares university

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Grant name

Grant code / Reference number

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

Yes

Title of funding source

Tarbiat modares university

Proportion provided by this source

100

Public or private sector

Public

Domestic or foreign origin

Domestic

Category of foreign source of funding

empty

Country of origin

Type of organization providing the funding

Academic

Person responsible for general inquiries

Contact

Name of organization / entity

Tarbiat modares university

Full name of responsible person

Zohre Zaki

Position

Master student

Latest degree

Bachelor

Other areas of specialty/work

Physiotherapy

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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

Yes - There is a plan to make this available

Data Dictionary

Yes - There is a plan to make this available

Title and more details about the data/document

Unidentifiable people can share all the data

When the data will become available and for how long

Start the access period 6 months after printing the results

To whom data/document is available

Data will be available to researchers working in academic and scientific institutes in the industry

Under which criteria data/document could be used

To carry out scientific projects

From where data/document is obtainable

zohre zaki , zaki_zohre@yahoo.com

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

Submitting the project plan and the full review of the individuals and the organization carrying out the project and will be sent upon confirmation

Comments