Clinical Trial Protocol
Iranian Registry of Clinical Trials

22 Nov 2026

Study the effect of dry needling of supraspinatus muscle on the management of patients with impingement syndrome

Protocol summary

Summary

The objective of this randomized trial is to evaluate the effect of dry needling of supraspinatus muscle on the management of patients with impingement syndrome. In this study 15 subjects with subacromial impingement syndrome who suffer from shoulder pain 1-week before intervention and have localized pain at the proximal and antero-lateral aspect of shoulder joint and have at least one positive impingement test will be recruited and randomly assigned into intervention or control group. The subjects in the intervention group will receive one session of dry needling. The subjects in control group will receive no intervention. Changes of the average pain score, range of motion, and upper extremity performance improvement in the patients, will be measured before the intervention and after session, and will be compared between 2 groups.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT201601234203N10**
Registration date: **2016-03-02, 1394/12/12**
Registration timing: **prospective**

Last update:
Update count: **0**

Registration date

2016-03-02, 1394/12/12

Registrant information

Name

Atefeh Aminian Far

Name of organization / entity

Semnan University of Medical Sciences

Country

Iran (Islamic Republic of)

Phone

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Recruitment status

Recruitment complete

Funding source

Vice chancellor for research, Semnan University of Medical Sciences

Expected recruitment start date

2016-04-20, 1395/02/01

Expected recruitment end date

2016-09-20, 1395/06/30

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Study the effect of dry needling of supraspinatus muscle on the management of patients with impingement syndrome

Public title

Dry needling and shoulder impingement syndrome

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria: Patients who suffer from shoulder painat the proximal and antero-lateral aspect of shoulder region lasting more than 1-week; Having at least one positive impingement test. Exclusion criteria: Fibromyalgia; Pregnancy; Traumatic onset of symptoms; Other histoy of shoulder injury; Torn tendons; Ligamentous laxity; Numbness or tingling in the upper extremity; History of shoulder or neck surgery; Systemic diseases; BMI > 28; History of steroid injection 3 months before intervention; History of physiotherapy 6 months

before intervention; Depression; Taking analgesics or muscle relaxants 72 hours befor examination; Complete tear of rotator cuff muscles diagnosed with ultrasonography; Frozen shoulder. Frozen shoulder

Age
From **30 years** old to **60 years** old

Gender
Both

Phase
N/A

Groups that have been masked
No information

Sample size
Target sample size: **15**

Randomization (investigator's opinion)
Randomized

Randomization description

Blinding (investigator's opinion)
Not blinded

Blinding description

Placebo
Not used

Assignment
Parallel

Other design features
Randomization through sealed envelope

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee
Ethics committee of Semnan University of Medical Sciences

Street address
Bassij Blvd, Semnan University of Medical Sciences, Deputy of Research, Semnan, Iran.

City
Semnan

Postal code

Approval date
2016-01-05, 1394/10/15

Ethics committee reference number
ir.semums.rec.1394.130

Health conditions studied

1

Description of health condition studied
Impingement syndrome of shoulder

ICD-10 code
M75.4

ICD-10 code description
Impingement syndrome of shoulder

Primary outcomes

1

Description
Pain

Timepoint
Before intervention, Immediately after intervention, 10 days after intervention

Method of measurement
VAS

2

Description
Shoulder range of motion

Timepoint
befor intervention, Immediately after intervention, 10 days after intervention

Method of measurement
Goniometery

3

Description
Shoulder function

Timepoint
befor intervention-10 days after intervention

Method of measurement
Shoulder performance questionnaire

Secondary outcomes

empty

Intervention groups

1

Description
Control group: No intervention

Category
Treatment - Drugs

2

Description
Intervention group: Inserting of dry needling into trigger point of supraspinatus muscle with a 0.2 mm diameter and 4 mm length needle, lasting for 2 minutes.

Category
Treatment - Other

Recruitment centers

1

Recruitment center

Name of recruitment center
Tabatabaee Clinic of Semnan University of Medical Sciences

Full name of responsible person

Dr Atefeh Aminian Far

Street address

City

Semnan

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Vice-chancellor for research, Semnan University of Medical Sciences

Full name of responsible person

Dr, Ali Rashidipour

Street address

Bassij Blvd, Semnan University of Medical Sciences, Deputy of Research, Semnan, Iran.

City

Semnan

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, Semnan 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

Semnan University of Medical Sciences

Full name of responsible person

Dr. Atefeh Aminian Far

Position

Ph.D of Physiotherapy/ Assistant Professor

Other areas of specialty/work

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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