

Clinical Trial Protocol

Iranian Registry of Clinical Trials

13 Jun 2026

comparison of the effectiveness of blind versus ultrasound guided corticosteroid injection in impingement syndrome

Protocol summary

Summary

The purpose of this study was to compare the efficacy of ultrasound-guided versus blind corticosteroid injections in patients with impingement syndrome. Inclusion criteria: posterolateral shoulder pain; Pain in abduction or painful restriction of glenohumeral mobility; provocation of symptoms by Neer and Hawkins tests. Exclusion criteria: shoulder pain due to osseous pathology; duration of shoulder pain more than three months; previous trauma in the shoulder region; evidence of predisposing condition such as diabetes mellitus. This study was performed in patients 18 to 65 years old with shoulder pain that refer to Isfahan University of Medical Science clinics between February 2014 to February 2015. 40 patients after diagnosis of Impingement syndrome by shoulder ultrasound, divided randomly into two groups. In the first group Corticosteroid injections were performed under ultrasound guidance through the posterior approach and in the second group Corticosteroid injections were performed with blind method. Then all patients at the baseline and after 6 weeks were examined for all factors of pain function and shoulder range of Motion, for this purpose used a Shoulder Pain and Disability Index questionnaire and goniometer.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT2015042021872N1**
Registration date: **2015-06-02, 1394/03/12**
Registration timing: **retrospective**

Last update:

Update count: **0**

Registration date

2015-06-02, 1394/03/12

Registrant information

Name

Mohsen Banimehdi

Name of organization / entity

Isfahan University of Medical Sciences

Country

Iran (Islamic Republic of)

Phone

+98 21 4486 5939

Email address

davood.azadi@med.mui.ac.ir

Recruitment status

Recruitment complete

Funding source

Isfahan University of Medical Sciences

Expected recruitment start date

2014-01-21, 1392/11/01

Expected recruitment end date

2015-01-21, 1393/11/01

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

comparison of the effectiveness of blind versus ultrasound guided corticosteroid injection in impingement syndrome

Public title

the effectiveness of corticosteroid injection in impingement syndrome

Purpose

Treatment

Inclusion/Exclusion criteria

inclusion criteria: posterolateral shoulder pain; Pain in abduction or painful restriction of glenohumeral mobility; provocation of symptoms by Neer and Hawkins tests.

Exclusion criteria: shoulder pain due to osseous pathology (e.g. osteoarthritis, osteonecrosis); duration of shoulder pain more than three month; previous trauma in the shoulder region; previous physiotherapy or local steroid injection; evidence of predisposing condition such as pregnancy; diabetes mellitus; rheumatoid arthritis; hypothyroidism.

Age

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

Gender

Both

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: **40**

Randomization (investigator's opinion)

Randomized

Randomization description

Blinding (investigator's opinion)

Not blinded

Blinding description

Placebo

Not used

Assignment

Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Isfahan University Of Medical Sciences

Street address

Hearjerib street

City

Isfahan

Postal code

Approval date

2014-04-21, 1393/02/01

Ethics committee reference number

394037

Health conditions studied

1

Description of health condition studied

Impingement syndrome

ICD-10 code

M75.4

ICD-10 code description

Bursitis of shoulder

Primary outcomes

1

Description

pain

Timepoint

Beginning of the study, after six weeks

Method of measurement

questionnaire

Secondary outcomes

1

Description

function

Timepoint

six weeks

Method of measurement

questionnaire and goniometer

2

Description

shoulder range of motion

Timepoint

six week

Method of measurement

questionnaire and goniometer

Intervention groups

1

Description

intervention group with one dose of 40mg methyl prednisolon and 1 cc lidocain 2% Ultrasound-guided injection

Category

Treatment - Drugs

2

Description

control group: one dose of 40mg methyl prednisolon and 1 cc lidocain 2% with use of blind injection

Category

Treatment - Drugs

Recruitment centers

1

Recruitment center

Name of recruitment center

Physical Medicine Clinic of Alzahra Hospital

Full name of responsible person

Mohsen Banimehdi

Street address

Hezarjerib Street, Isfahan University Of Medical Sciences,

City
Isfahan

Sponsors / Funding sources

1

Sponsor

Name of organization / entity
Isfahan University Of Medical Sciences
Full name of responsible person
Shila Haghighat
Street address
Hezarjerib Street
City
Isfahan
Grant name
Grant code / Reference number
Is the source of funding the same sponsor organization/entity?
Yes
Title of funding source
Isfahan 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
Isfahan University Of Medical Sciences
Full name of responsible person
Mohsen Banimehdi
Position
specialist doctor of physical medicin and rehabilitation
Other areas of specialty/work
Street address
Hezar Jerib Street
City
Isfahan
Postal code
Phone
+98 31 4435 6897
Fax
Email
mohsenbanimehdi@yahoo.com
Web page address

Person responsible for scientific

inquiries

Contact

Name of organization / entity
Isafahn University of Medical Scineces
Full name of responsible person
Haghighat Shila
Position
Specialist at Physical Medicine
Other areas of specialty/work
Street address
Isfahan hezar jerub Street
City
Isfahan
Postal code
Phone
+98 31 4435 6897
Fax
Email
haghighatshila@gmail.com
Web page address

Person responsible for updating data

Contact

Name of organization / entity
Isfahan University of Medical Sciences
Full name of responsible person
Mohsen Bani Mehdi
Position
Specialist
Other areas of specialty/work
Street address
Hezarjerib Street
City
Isfahan
Postal code
Phone
00
Fax
Email
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