

Clinical Trial Protocol

Iranian Registry of Clinical Trials

18 Sep 2026

Evaluating the Effect of Dry Needling on the Radiating Pain in Subjects with Discopathic Low Back Pain

Protocol summary

Summary

Abstract: The purpose of present study was compared the effect of DN on the pain and function of subjects with discogenic radiating LBP with standard conservative approach. This study was a double blinded (subjects and examiner) randomized control trial. Fifty eight patients with discopathic radicular low back pain were screened for eligibility criteria then were randomized into control(n=29) or the experimental group(n=29).Inclusion criteria was radiating pain at one or both legs.Exclusion criteria were coagulation disorder ,tumor, infection , fracture or instability in lumbar region. Primary outcome measure was pain intensity. Secondary outcome measure was functional disability. Radiating pain intensity and disability were assessed at baseline, at the end of treatment and two months follow up.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT2015071121479N2**

Registration date: **2015-08-31, 1394/06/09**

Registration timing: **retrospective**

Last update:

Update count: **0**

Registration date

2015-08-31, 1394/06/09

Registrant information

Name

Abdolkarim Karimi

Name of organization / entity

Isfahan University of Medical Sciences

Country

Iran (Islamic Republic of)

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Recruitment status

Recruitment complete

Funding source

The study is the results of a thesis for M.Sc. degree in physical therapy registered in Isfahan University of Medical Sciences (Grant 393082).

Expected recruitment start date

2014-01-21, 1392/11/01

Expected recruitment end date

2015-04-18, 1394/01/29

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Evaluating the Effect of Dry Needling on the Radiating Pain in Subjects with Discopathic Low Back Pain

Public title

Evaluating the Effect of Dry Needling on the Radiating Pain in Subjects with Discopathic Low Back Pain

Purpose

Treatment

Inclusion/Exclusion criteria

The inclusion criteria :(age between 20 and 50 years old ; radiating pain at one or both legs ; abnormal electromyographyfinding) exclusion: (they had coagulation disorder or they were under anticoagulant therapy for any reason (due to high risk of hemorrhage following needling) ; if they suffered from psychologic disorders (due to unreliable pain report during the study) ; Subjects with needle phobia ; tumor and infection in lumbar region ; acute or chronic radiating LBP due to fracture or instability ; contraindications of dry needling)

Age

From **74 years** old to **44 years** old

Gender

Both

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: **58**

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

Isfahan University of Medical Sciences

Street address

Hezer Jarib, Isfahan University of Medical Sciences

City

Isfahan

Postal code

Approval date

2013-09-23, 1392/07/01

Ethics committee reference number

393082

Health conditions studied

1

Description of health condition studied

discopathy low back pain

ICD-10 code

M51.1

ICD-10 code description

Lumbar and other intervertebral disc disorders with radiculopathy

Primary outcomes

1

Description

radiating pain

Timepoint

at baseline (in the first intervention session), in the last intervention session and two months after the last intervention session (follow up)

Method of measurement

visual analog scale

Secondary outcomes

1

Description

functional disability

Timepoint

at baseline (in the first intervention session), in the last intervention session and two months after the last intervention session (follow up)

Method of measurement

Oswestry functional disability questionnaire

Intervention groups

1

Description

Participants in experimental group received standard physiotherapy for 10 sessions every other day and dry needling for 5 sessions. Standard physiotherapy included thermal modality, TENS (Acupuncture like: Frequency = 1-4Hz, Duration= 250 ms , Time= 20 minute) , ultrasound (Frequency = 1MHz , pulsed , intensity = 1 w/cm2 , Time = 1minute / 1 cm2)and exercise therapy(Mckenzie program and stabilizing exercise). Each standard physiotherapy session took about 45 minutes. Dry needling sessions were at the end of second, forth, six, eighth and tenth sessions DN needed an addition 15 minutes to be performed

Category

Other

2

Description

Subjects in control group received standard physiotherapy for 10 sessions every other day. Standard physiotherapy included thermal modality, TENS (Acupuncture like: Frequency = 1-4Hz, Duration= 250 ms , Time= 20 minute) , ultrasound (Frequency = 1MHz , pulsed , intensity = 1 w/cm2 , Time = 1minute / 1 cm2)and exercise therapy(Mckenzie program and stabilizing exercise). Each session took about 45 minutes.

Category

Rehabilitation

Recruitment centers

1

Recruitment center

Name of recruitment center

Ayat Alah Kashani Hospital

Full name of responsible person

Mojtaba Heshmati pour

Street address

Ayat Alah Kashani , Isfahan

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Sponsors / Funding sources**1****Sponsor****Name of organization / entity**

Isfahan University of Medical Sciences

Full name of responsible person

Dr Zahra Sadat Rezaeian

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Hezar Jarib , Isfahan

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**

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Full name of responsible person

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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