

Clinical Trial Protocol

Iranian Registry of Clinical Trials

11 Sep 2026

Ultrasound-Guided Medial-Branch Block for pain management of Lumbar facet joints pain in patients referral to Akhtar hospital between 2012-2013 years.

Protocol summary

Summary

Objectives: This study is aimed to evaluate ultrasound-Guided Medial-Branch Block for Lumbar facet joints in patients with chronic low back pain in the facet joint region who were referred to pain clinics of Akhtar Hospitals between 2012-2013 years. **Design:** Prospective clinical trial. **Setting and conduct :** Tertiary regional and teaching hospital. **Participants** including major eligibility criteria: patients with chronic low back pain in the facet joint region who were referred to pain clinics of Akhtar Hospitals between 2012-2013 years, were included. **Intervention:** Local anesthesia was provided by injection of 1% lidocaine 1 mL. A 21-gauge, 9-cm spinal needle was directed in the ultrasound plane at an angle of approximately 45 to 60 degrees to the skin and was advanced laterally and medially until the needle tip reached the target and bony contact was felt. A longitudinal paravertebral ultrasound view was then obtained to verify the position of the needle at the cephalad margin of the transverse process. C-arm fluoroscopy was performed to assess the precision of the needle location. Needle position was evaluated according to the International Spinal Society guidelines and considered to be in target, if it was slightly medial to the lateral margin of silhouette of the superior articular process (SAP) in the posteroanterior view and high on the eye of the Scotty dog in the oblique view. If the needle was out of the radiologic target or invisible in the sonography, it was repositioned under fluoroscopy guidance before the drug was injected. Then, For all patients were injected mix of triamcinolone acetone 40 mg and 1% lidocaine 1 mL at L1-L2, L2-L3, L3-L4, L4-L5, L5-S1 levels on the right/left side for treatment of lumbar facet joint pain. **Main outcome measures (variables):** Visual analog scale; Oswestry disability index score; Success rate; Time of needle placement; Patient request for analgesia.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT201306168435N6**

Registration date: **2013-07-09, 1392/04/18**

Registration timing: **retrospective**

Last update:

Update count: **0**

Registration date

2013-07-09, 1392/04/18

Registrant information

Name

Seyed Masoud Hashemi

Name of organization / entity

Department of Anesthesiology and Pain

Country

Iran (Islamic Republic of)

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Recruitment status

Recruitment complete

Funding source

Vice chancellor for research, Tehran University of Medical Sciences and Health Services

Expected recruitment start date

2012-04-03, 1391/01/15

Expected recruitment end date

2013-03-15, 1391/12/25

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Ultrasound-Guided Medial-Branch Block for pain management of Lumbar facet joints pain in patients referral to Akhtar hospital between 2012-2013 years.

Public title

Management of chronic lumbar pain with ultrasound-guided for block of lumbar facet joints

Purpose

Treatment

Inclusion/Exclusion criteria

Main inclusion criteria: Age > 18 years old; Symptoms of chronic low back pain for more than three months; Persistent low back pain with or without pain radiating to the upper leg; Focal tenderness over the lumbar spine joint; Hyperextension pain; Absence of neurological defects; Contraindication of lumbar surgery; Absence of radicular syndrome; No respond to traditional treatments; Signing consent to participate in the study. Main exclusion criteria: Lumbar radicular pain; Disc with radicular symptoms of pain associated with radiological or neurological tests; Coagulation disorders; Allergy to local anesthetic solution; Malignancy; Psychiatric problems and poor patient cooperation; Speech problems; Pregnancy; Surgery indication; Local skin infection at the operative site; Spinal deformities; Body mass index > 29 kg/m²

Age

From **18 years** old to **70 years** old

Gender

Both

Phase

2-3

Groups that have been masked

No information

Sample size

Target sample size: **60**

Randomization (investigator's opinion)

N/A

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

Ethics committee of Shahid Beheshti University of Medical Sciences and Health Services

Street address

Tabnak S.

City

Tehran

Postal code**Approval date**

2012-01-13, 1390/10/23

Ethics committee reference number

P/1390-10-23

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

Chronic low back pain

ICD-10 code

M54.5

ICD-10 code description

Diagnosis Low back pain

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

Time of needle placement

Timepoint

During procedure

Method of measurement

The time from insertion into skin until fluoroscopic confirmation

2**Description**

Patient request for analgesia

Timepoint

Before, immediately after, and one week, 4 and 6 weeks after the procedure

Method of measurement

Based on the patient's request

3**Description**

Disability measurement

Timepoint

Before, immediately after, and one week, 4 and 6 weeks after the procedure

Method of measurement

Oswestry disability index score

4**Description**

Success rate

Timepoint

Immediately after the procedure

Method of measurement

Pain relief more than 50%

5

Description

Pain score

Timepoint

Before, immediately after, and one week, 4 and 6 weeks after the procedure

Method of measurement

Visual analog scale

Secondary outcomes

empty

Intervention groups

1

Description

Intervention group: Ultrasound guided nerve block

Category

Treatment - Other

2

Description

Control group: Conventional fluoroscopy guided nerve block

Category

Treatment - Other

Recruitment centers

1

Recruitment center

Name of recruitment center

Akhtar Hospital

Full name of responsible person

Seyed Masoud Hashemi MD

Street address

Elahiye St.

City

Tehran

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Vice chancellor for research, Shahid Beheshti University of Medical Sciences and Health Services

Full name of responsible person

Mohammad Rahmati Roodsari MD

Street address

Parvaneh St., Yaman St., Shahid Chamran Expressway

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Tehran

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, Shahid Beheshti University of Medical Sciences and Health Services

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

Akhtar Hospital

Full name of responsible person

Seyed Masoud Hashemi

Position

Assistant professor

Other areas of specialty/work

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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