Clinical Trial Protocol
Iranian Registry of Clinical Trials

09 Nov 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 acetonide 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

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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 kh/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
City
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
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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