

Clinical Trial Protocol

Iranian Registry of Clinical Trials

10 Jun 2026

Comparison of transforaminal epidural versus intra-articular facet joint injection for treatment of lumbar radiculopathy

Protocol summary

Study aim

The objective of this study is to compare the analgesic efficacy of intra-articular facet joint block versus transforaminal epidural injection in patients with lumbar radiculopathy.

Design

A non blinded randomized controlled trial; single-center study with two intervention groups carried out from June 2023 to November 2023

Settings and conduct

The study was conducted in Anesthesia department of Combined Military Hospital Rawalpindi

Participants/Inclusion and exclusion criteria

Inclusion criteria included all male and female patients between ages 30-60 years presenting in the pain clinic after confirmation of lumbar radiculopathy diagnosed by standard MRI imaging studies. Exclusion criteria included patients with debilitating cardiac or respiratory disease, tumors of the spine with or without metastatic disease, patients with known allergy to lignocaine, bupivacaine or steroids, patients with a regional block done for pain in the last one year.

Intervention groups

The patients were divided into the facet-joint group (Group F) and the epidural group (Group E)

Main outcome variables

Main variables were pain relief after each block and assessed on visual analog score , numerical rating scale and Oswestry disability index.

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20230829059295N2**

Registration date: **2023-11-20, 1402/08/29**

Registration timing: **registered_while_recruiting**

Last update: **2023-11-20, 1402/08/29**

Update count: **0**

Registration date

2023-11-20, 1402/08/29

Registrant information

Name

Haroon Tariq

Name of organization / entity

Combined military hospital Rawalpindi

Country

Pakistan

Phone

+92 323 7399976

Email address

haroontariq299@gmail.com

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2023-06-01, 1402/03/11

Expected recruitment end date

2023-11-30, 1402/09/09

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Comparison of transforaminal epidural versus intra-articular facet joint injection for treatment of lumbar radiculopathy

Public title

Transforaminal epidural versus intra-articular facet joint injection for treatment of lumbar radiculopathy

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria:

All male and female patients between ages 30-60 years
Confirmed case of lumbar radiculopathy diagnosed by standard MRI imaging studies

Exclusion criteria:

Patients with debilitating cardiac or respiratory disease
Tumors of the spine with or without metastatic disease
Patients with known allergy to lignocaine, bupivacaine or steroids
Patients with a regional block done for pain in the last one year

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: **90**

Randomization (investigator's opinion)

Randomized

Randomization description

Randomization was done by non probability consecutive sampling via lottery method. Patients were divided in to facet joint group (Group F) and epidural group (Group E). Allocation concealment was not done.

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

Ethical committee of combined military hospital

Street address

Tamizudin road , lalkurti rawalpindi

City

Rawalpindi

Postal code

46000

Approval date

2023-05-29, 1402/03/08

Ethics committee reference number

CMH/RWP/412

Health conditions studied

1

Description of health condition studied

Lower backache and hip pain

ICD-10 code

M54.16

ICD-10 code description

Radiculopathy, lumbar region

Primary outcomes

1

Description

Patient satisfaction regarding pain relief after interventional procedure in lumbar radiculopathy

Timepoint

4 weeks and then 3 months post intervention

Method of measurement

Numerical rating scale (NRS) , Visual analog scale (VAS) , Oswestry disability index (ODI)

Secondary outcomes

empty

Intervention groups

1

Description

Intervention group: Facet-joint group (Group F), The procedure was carried out under fluoroscopic guidance with the patient in the prone position under strict aseptic measures. The site of needle insertion was anesthetized using 1% lignocaine on the skin and subcutaneous tissue. Spinal needle (22 G) was inserted, and sequential fluoroscopic views taken. Once appropriate position was reached, 2.5 ml contrast was injected through minibore tubing attached to the needle to confirm correct placement and rule out intravascular placement. One confirmed, 2 ml of 1% preservative-free lignocaine (20mg) with 60 mg of methylprednisolone was injected at the facet-joint site.

Category

Treatment - Other

2

Description

Intervention group: Epidural group (Group E) patients were placed in the prone position with the targeted site away from the interventionist. An Anteroposterior scout was done at vertebral level T12-S1 to confirm position and level before the procedure. Under fluoroscopic guidance, 2 ml of 1% preservative-free lignocaine (20mg) with 60 mg of methylprednisolone was injected once the needle was in the correct placement after confirmation with 2.5 ml of iodinated contrast.

Category

Treatment - Other

Recruitment centers

1

Recruitment center

Name of recruitment center

Combined Military Hospital

Full name of responsible person

Dr Haroon Tariq

Street address

Tamizudin road, Lalkurti Rawalpindi

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Rawalpindi

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46000

Phone

+92 51 9273426

Email

haroontariq299@gmail.com

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Combined military hospital

Full name of responsible person

Dr Rashid Iqbal

Street address

Tamizudin road, lalkurti rawalpindi

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haroontariq299@gmail.com

Grant name

Grant code / Reference number

Is the source of funding the same sponsor organization/entity?

Yes

Title of funding source

Combined military hospital

Proportion provided by this source

100

Public or private sector

Public

Domestic or foreign origin

Domestic

Category of foreign source of funding

empty

Country of origin

Type of organization providing the funding

Academic

Person responsible for general inquiries

Contact

Name of organization / entity

Combined Military Hospital

Full name of responsible person

Haroon Tariq

Position

Post graduate resident

Latest degree

Medical doctor

Other areas of specialty/work

Anesthesiology

Street address

House No 318, Street 5, Sector B1, DHA Phase 1, Rawalpindi

City

Rawalpindi

Province

Punjab

Postal code

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Person responsible for scientific inquiries

Contact

Name of organization / entity

Combined military hospital Rawalpindi

Full name of responsible person

Haroon Tariq

Position

Resident anesthesiology

Latest degree

Medical doctor

Other areas of specialty/work

Anesthesiology

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Person responsible for updating data

Contact

Name of organization / entity

Combined military hospital Rawalpindi

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Position

Resident anesthesiology

Latest degree

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Sharing plan

Deidentified Individual Participant Data Set (IPD)

Yes - There is a plan to make this available

Study Protocol

Yes - There is a plan to make this available

Statistical Analysis Plan

Yes - There is a plan to make this available

Informed Consent Form

Yes - There is a plan to make this available

Clinical Study Report

Yes - There is a plan to make this available

Analytic Code

Yes - There is a plan to make this available

Data Dictionary

Yes - There is a plan to make this available

Title and more details about the data/document

All collected data could be provided

When the data will become available and for how long

Data will be available for 2 years starting from December 2023 till December 2025

To whom data/document is available

Academic institutions

Under which criteria data/document could be used

Interventional studies being done on the same topic

From where data/document is obtainable

haroontariq299@gmail.com

What processes are involved for a request to access data/document

Please contact the email provided above to ask for the detailed data.

Comments