Clinical Trial Protocol
Iranian Registry of Clinical Trials

18 Sep 2026

Comparison between the effect of calcitonin by mesotherapy versus esteroid epidural injection in spinal canal stenosis

Protocol summary

Study aim
Comparison of the effect of calcitonin injection in the form of mesotherapy with epidural steroid injection in patients with spinal cord stenosis

Design
In this study, 20 patients with lumbar spinal stenosis who had the conditions for entering the study were randomly divided into two groups of 10, the first group was calcitonin by mesotherapy and the second group was epidural steroid injection.

Settings and conduct
This is a double-blind, randomized clinical trial that will be conducted on referrals to physical medicine and rehabilitation clinics of Shiraz University of Medical Sciences.

Participants/Inclusion and exclusion criteria
Persons aged 40 to 75 who are able to complete questionnaires Diabetes mellitus, rheumatic diseases, collagen and vascular disease, gout. Lupus, nerve damage, neuropathies and brucella BMI >42 History of trauma and spinal fractures and spondylolisthesis, History of injections inside or around a joint bleeding disorders History of allergy and allergic reaction to used drugs History of significant liver, kidney and cardiac disorders Use of anticoagulants

Intervention groups
The first group of calcitonin was injected with mesotherapy. The second group of steroids was injected epidural.

Main outcome variables
Reduce the need for epidural injections and reduce the side effects of treatment

General information

Reason for update

Acronym

IRCT registration information
IRCT registration number: **IRCT20171201037696N1**
Registration date: **2018-01-14, 1396/10/24**
Registration timing: **registered_while_recruiting**

Last update: **2018-01-14, 1396/10/24**
Update count: **0**

Registration date
2018-01-14, 1396/10/24

Registrant information

Name
Elham Sheibani

Name of organization / entity

Country
Iran (Islamic Republic of)

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Recruitment status
Recruitment complete

Funding source

Expected recruitment start date
2017-12-16, 1396/09/25

Expected recruitment end date
2018-09-21, 1397/06/30

Actual recruitment start date
empty

Actual recruitment end date
empty

Trial completion date
empty

Scientific title
Comparison between the effect of calcitonin by mesotherapy versus esteroid epidural injection in spinal canal stenosis

Public title
calcitonin mesotherapy in spinal canal stenosis

Purpose
Treatment
Inclusion/Exclusion criteria
Inclusion criteria:
Pain and other clinical symptoms of lumbar canal stenosis Complete and sign the consent form Age between 40 and 75 years
Exclusion criteria:
Diabetes mellitus, rheumatic diseases, collagen and vascular disease, gout. Lupus, nerve damage, neuropathies and brucella BMI >42 History of trauma and spinal fractures and spondylolisthesis, History of injections inside or around a joint bleeding disorders History of allergy and allergic reaction to used drugs History of significant liver, kidney and cardiac disorders Use of anticoagulants
Age
From **40 years** old to **75 years** old
Gender
Both

Phase
N/A
Groups that have been masked

- Data analyser

Sample size
Target sample size: **20**
Randomization (investigator's opinion)
Randomized
Randomization description
Randomized blocked method
Blinding (investigator's opinion)
Single blinded
Blinding description
A single blind trials that the patient and the investigator are aware of how the study is conducted, but the statistical analyzer is kept blind.
Placebo
Not used
Assignment
Parallel
Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee
Name of ethics committee
Ethics committee of Shiraz University of Medical Sciences
Street address
Fars Province, Shiraz, Zand
City
Shiraz
Province
Fars
Postal code
71348-14336
Approval date
2017-10-16, 1396/07/24
Ethics committee reference number
IR.SUMS.MED.REC.1396.70

Health conditions studied

1

Description of health condition studied
spinal canal stenosis
ICD-10 code
M48.06
ICD-10 code description
Spinal stenosis, lumbar region

Primary outcomes

1

Description
Reducing pain after undergoing mesotherapy
Timepoint
Before starting treatment and 4 and 8 weeks after injection
Method of measurement
Visual Analogue Scale Questionnaire

Secondary outcomes

1

Description
Evaluation the effect of calcitonin mesotherapy and epidural steroid on functional improvement
Timepoint
Before starting treatment and 4 and 8 weeks after injection
Method of measurement
Oswestry Disability Index Questionnaire. Quebec Back pain Disability index

Intervention groups

1

Description
Intervention group: Injection of calcitonin by mesotherapy
Category
Treatment - Drugs

2

Description
Intervention group: epidural steroid injection
Category
Treatment - Drugs

Recruitment centers

1

Recruitment center

Name of recruitment center
Clinics of Physical Medicine and Rehabilitation of Shiraz University of Medical Sciences

Full name of responsible person
Hamidreza Farpoor

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Fars Province, Shiraz, Zand, Iran

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Sponsors / Funding sources

1

Sponsor

Name of organization / entity
Shiraz University of Medical Sciences

Full name of responsible person
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Grant name

Grant code / Reference number

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

Title of funding source
Shiraz University of Medical Sciences

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
Shiraz University of Medical Sciences

Full name of responsible person
Hamid Reza Farpoor

Position
Assistant Professor

Latest degree
Specialist

Other areas of specialty/work
Physical Medicine

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Person responsible for updating data

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Name of organization / entity
Shahid Beheshti University of Medical Sciences

Full name of responsible person

Elham sheibani
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Latest degree
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Sharing plan

Deidentified Individual Participant Data Set (IPD)
Undecided - It is not yet known if there will be a plan to make this available
Study Protocol
Undecided - It is not yet known if there will be a plan to make this available
Statistical Analysis Plan
Undecided - It is not yet known if there will be a plan to make this available
Informed Consent Form
Undecided - It is not yet known if there will be a plan to make this available
Clinical Study Report
Undecided - It is not yet known if there will be a plan to make this available
Analytic Code
Undecided - It is not yet known if there will be a plan to make this available
Data Dictionary
Undecided - It is not yet known if there will be a plan to make this available