

Clinical Trial Protocol

Iranian Registry of Clinical Trials

01 Jun 2026

Comparison of Effect of Bupivacaine and Lidocaine as Local Anesthetics on Incidence of Flare-up after Root Canal Therapy

Protocol summary

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Summary

The purpose of this study was to compare the effect of Bupivacaine and Lidocaine as local anesthetics on the incidence of flare-up after root canal therapy. A total of 60 patients who presented to the office of 3 endodontists were invited to participate in this double blind study. Patients had no history of cardiovascular disease, hypersensitivity to amide types of local anesthetics, renal failure, or hyperthyroidism. The patients were randomly assigned into one of two groups: 0.5 percent Bupivacaine 1/200000 Epinephrine or 2 percent Lidocaine 1/100000 Epinephrine. After root canal therapy, the extent of postoperative pain was measured in 48 hours and categorized in 4 scores, 0 to 3.

Recruitment status

Recruitment complete

Funding source

without

Expected recruitment start date

2009-08-01, 1388/05/10

Expected recruitment end date

2009-12-29, 1388/10/08

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT138809082785N1**

Registration date: **2010-05-29, 1389/03/08**

Registration timing: **retrospective**

Last update:

Update count: **0**

Registration date

2010-05-29, 1389/03/08

Registrant information

Name

Safoora Sahebi

Name of organization / entity

Shiraz University of Medical Sciences, Dental School

Country

Iran (Islamic Republic of)

Phone

+98 71 1626 3193

Email address

Scientific title

Comparison of Effect of Bupivacaine and Lidocaine as Local Anesthetics on Incidence of Flare-up after Root Canal Therapy

Public title

Comparison of Effect of Bupivacaine and Lidocaine as Local Anesthetics on Incidence of Flare-up after Root Canal Therapy

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria: patients without heart disease, allergic to amid group anesthesia, renal failure, hyperthyroidism, Exclusion criteria: patient's noncooperation

Age

No age limit

Gender

Both

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: 60

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

Shiraz University of Medical Sciences

Street address

Dental School, Ghomabad St.

City

Shiraz

Postal code

7195615878

Approval date

empty

Ethics committee reference number

230/1/88

Health conditions studied

1

Description of health condition studied

Post operative pain after endodontic treatment

ICD-10 code

K08.8

ICD-10 code description

Other specified disorders of teeth and supporting structures

Primary outcomes

1

Description

pain after endodontic treatment

Timepoint

12, 24, 48 hours after the procedure

Method of measurement

visual analogue scale

Secondary outcomes

empty

Intervention groups

1

Description

bupivacaine 0.5% with 1/200000 epinephrine, one dose, 1.8 ml for block or infiltration anesthesia

Category

Treatment - Drugs

2

Description

Lidocaine 2%, one dose, with epinephrine 1/100000, for block or infiltration anesthesia

Category

Treatment - Drugs

Recruitment centers

1

Recruitment center

Name of recruitment center

Dental clinic of Shiraz Dental School

Full name of responsible person

Dr. Safoora Sahebi

Street address

Ghomabad street, Shiraz Dental School

City

Shiraz

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Shiraz University of Medical Sciences

Full name of responsible person

Dr Safoora Sahebi

Street address

Shiraz Dental School,

City

Shiraz,

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

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

Shiraz University of Medical Sciences

Full name of responsible person

Dr. Safoora Sahebi

Position

Assistant Professor

Other areas of specialty/work

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Person responsible for scientific inquiries

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Position

Assistant Professor of Endodontic Department

Other areas of specialty/work

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Person responsible for updating data

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Full name of responsible person

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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