

Clinical Trial Protocol

Iranian Registry of Clinical Trials

03 Aug 2026

Comparing the effect of supplementary buccal and/or lingual articaine infiltration on inferior alveolar nerve block success rate in symptomatic irreversible pulpitis.

Protocol summary

Summary

□ Objectives, the aim of this study will compare the effect of supplementary buccal and/or lingual articaine infiltration after inferior alveolar nerve block success rate in symptomatic irreversible pulpitis (2) Design (study groups and phase, sample size, blinding, randomization, single or multi center: randomized clinical trial, double blind, 160 samples, single center (3) Setting and conduct: these samples will randomly be divided to 4 groups (3 intervention, one control). (4) Participants including major eligibility criteria: healthy patients between 18 to 65 years old, male or female have one molar with irreversible pulpitis included in this study (totally 160 person). (5) Intervention: endodontic access preparation will initiate after injections and pain during treatment will be recorded. (6) main outcome measures (primary and secondary outcome variables): intensity of pain (0-170) will be recorded.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT2015112715782N3**
Registration date: **2016-04-26, 1395/02/07**
Registration timing: **retrospective**

Last update:

Update count: **0**

Registration date

2016-04-26, 1395/02/07

Registrant information

Name

Peyman Mehrvarzfar

Name of organization / entity

Tehran Medical Science Branch, Islamic Azad

University

Country

Iran (Islamic Republic of)

Phone

+98 21 8875 9644

Email address

p_mehrvarzfar@dentaliau.ac.ir

Recruitment status

Recruitment complete

Funding source

Investigator.

Expected recruitment start date

2015-11-22, 1394/09/01

Expected recruitment end date

2016-01-21, 1394/11/01

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Comparing the effect of supplementary buccal and/or lingual articaine infiltration on inferior alveolar nerve block success rate in symptomatic irreversible pulpitis.

Public title

Comparing the effect of supplementary injection on inferior alveolar nerve block success rate

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria: patients between 18 to 65 years old; without any systematic disease or drug using; no allergic reaction to the anesthetic; no smoking; not using analgesic 24 hours ago; no pregnant or breastfeeding and they must have one molar with irreversible pulpitis.

Exclusion criteria: pulp necrosis; periapical radiolucency.

Age
From **18 years** old to **65 years** old

Gender
Both

Phase
N/A

Groups that have been masked
No information

Sample size
Target sample size: **160**

Randomization (investigator's opinion)
Randomized

Randomization description

Blinding (investigator's opinion)
Double blinded

Blinding description

Placebo
Not used

Assignment
Parallel

Other design features
Table of random numbers will use for randomization.

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Ethics Committee of Tehran Medical Science
Branch, Islamic Azad University

Street address

No.4, Neyestan 10 Alley, Pasdaran Street

City

Tehran

Postal code

19585/175

Approval date

2015-06-14, 1394/03/24

Ethics committee reference number

AZadUMS-94/P/166/D

Health conditions studied

1

Description of health condition studied

irreversible pulpitis

ICD-10 code

ICD-10 code description

Primary outcomes

1

Description

pain

Timepoint

15 minute after injection

Method of measurement

Heft Parker visual analog scale

Secondary outcomes

empty

Intervention groups

1

Description

intervention group 1: block injection with articaine buccal
infiltration

Category

Treatment - Other

2

Description

intervention group 2: block injection with articaine
lingual infiltration

Category

Treatment - Other

3

Description

intervention group 3: block injection with articaine buccal
and lingual infiltration

Category

Treatment - Other

4

Description

control group: block injectin without any supplementary
injectoin

Category

Treatment - Other

Recruitment centers

1

Recruitment center

Name of recruitment center

Tehran Medical Science branch, Islamic Azad
University

Full name of responsible person

Peyman Mervarzfar

Street address

No.4, Neyestan 10 Alley, Pasdaran Street

City

Tehran

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

investigator

Full name of responsible person

Peyman Mehrvarzfar

Street address

Tehran medical science branch, Islamic azad university

City

Tehran

Grant name**Grant code / Reference number****Is the source of funding the same sponsor organization/entity?**

Yes

Title of funding source

investigator

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**

Tehran Medical Science Branch, Islamic Azad University

Full name of responsible person

Setareh Ghannad

Position

Endodontic Resident/ DDS

Other areas of specialty/work**Street address**

No.4, Neyestane 10 Alley, Pasdaran Street

City

Tehran

Postal code

19585/175

Phone

+98 21 8868 1285

Fax

+98 21 8875 9644

Email

Ghannad.setareh@yahoo.com

Web page address

Person responsible for scientific inquiries

Contact**Name of organization / entity**

Tehran Medical Science Branch/ Islamic Azad University

Full name of responsible person

Peyman Mehrvarzfar

Position

Associate Professor/ DDS, Ms

Other areas of specialty/work**Street address**

No.4, Neyestan 10 Alley, Pasdaran Street

City

Tehran

Postal code**Phone**

+98 21 8875 9644

Fax**Email**

P_mehrvarzfar@dentaliau.ac.ir

Web page address

Person responsible for updating data

Contact**Name of organization / entity**

Tehran Medical Science Branch, Islamic Azad University

Full name of responsible person

Setareh Ghannad

Position

Endodontic Resident/ DDS

Other areas of specialty/work**Street address**

No.4, Neyestan 10 Alley, Pasdaran Street

City

Tehran

Postal code

19585/175

Phone

+98 21 8868 1285

Fax

+98 21 8875 9644

Email

ghannad.setareh@yahoo.com

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