

Clinical Trial Protocol

Iranian Registry of Clinical Trials

19 Sep 2026

Effect of chlordiazepoxide and oxazepam on the success rate of mandibular nerve block anesthesia

Protocol summary

Summary

The success rate of inferior alveolar nerve block has always been discussed. The present study was aimed to investigate the effect of chlordiazepoxide and oxazepam on the success rate of mandibular block anesthesia. In this randomized double blind clinical trial study, 75 healthy adults with no consumption of medications affecting pain perception were investigated. The participants were randomly assigned into three groups, 25 participants in each group. The patients in chlordiazepoxide and oxazepam groups received 10 mg chlordiazepoxide and 10 mg oxazepam orally two hours before the nerve block, respectively. The patients in control group received placebo. Then, the inferior alveolar nerve block was performed using a cartridge containing lidocaine 2% and epinephrine 1/80,000. The success rate of IANB in 5, 15 and 30-minute periods after performing the nerve block in the second premolar and first molar in reaction to the stimuli resulting from an electric pulp tester was considered as the block success, and the pain level during the needle insertion into the soft tissue was measured by a visual analogue scale (VAS). Data were analyzed by SPSS 16 software using ANOVA, chi-square and Fisher's exact tests.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT2015082717880N2**
Registration date: **2015-09-06, 1394/06/15**
Registration timing: **registered_while_recruiting**

Last update:

Update count: **0**

Registration date

2015-09-06, 1394/06/15

Registrant information

Name

Roohollah Sharifi

Name of organization / entity

Kermanshah University of Medical Sciences

Country

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Recruitment status

Recruitment complete

Funding source

Kermanshah University of Medical Sciences

Expected recruitment start date

2015-09-01, 1394/06/10

Expected recruitment end date

2015-10-01, 1394/07/09

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Effect of chlordiazepoxide and oxazepam on the success rate of mandibular nerve block anesthesia

Public title

Effect of chlordiazepoxide and oxazepam on the success rate of mandibular nerve block anesthesia

Purpose

Supportive

Inclusion/Exclusion criteria

The criteria for exclusion from the study included necrosis, pulpitis or tooth pain, mandibular orthodontic treatments, consumption of analgesics like Non-steroidal anti-inflammatory drug (NSAID) during the past two

weeks, daily consumption of benzodiazepines during the past two weeks, pregnancy or breastfeeding, contraindications of chlordiazepoxide and oxazepam and consumption of drugs interfering with chlordiazepoxide and oxazepam.

Age

From **18 years** old to **45 years** old

Gender

Both

Phase

2

Groups that have been masked

No information

Sample size

Target sample size: **75**

Randomization (investigator's opinion)

Randomized

Randomization description**Blinding (investigator's opinion)**

Double blinded

Blinding description**Placebo**

Used

Assignment

Parallel

Other design features**Secondary Ids**

empty

Ethics committees**1****Ethics committee****Name of ethics committee**

Ethics Committee Kermanshah University of Medical Sciences

Street address

Shahid Beheshti Blv.

City

Kermanshah

Postal code**Approval date**

2015-02-20, 1393/12/01

Ethics committee reference number

93065, 93066

Health conditions studied**1****Description of health condition studied**

Embedded and impacted teeth

ICD-10 code

K01.1

ICD-10 code description

An impacted tooth is a tooth that has failed to erupt because of obstruction by another tooth.

Primary outcomes**1****Description**

success rate of anesthesia

Timepoint

5, 15 and 30 min

Method of measurement

electric pulp tester

Secondary outcomes**1****Description**

Pain level

Timepoint

During the injection

Method of measurement

visual analog scale

Intervention groups**1****Description**

Intervention group :chlordiazepoxide, (10 mg)

Category

Treatment - Drugs

2**Description**

Intervention group :(10 mg) oxazepam tablet.

Category

Treatment - Drugs

3**Description**

control group received a capsule containing vitamin C with a glass of orange juice as placebo.

Category

Treatment - Drugs

Recruitment centers**1****Recruitment center****Name of recruitment center**

Oral and Maxillofacial Surgery Department

Full name of responsible person

Dr Hesam Nazari

Street address

Shariati St.,

City

Kermanshah

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Vice Chancellor for research of Kermanshah
University of Medical Sciences

Full name of responsible person

Reza Khodarahmi

Street address

Shahid Beheshti Blv

City

Kermanshah

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 of Kermanshah 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**

Department of Oral and Maxillofacial Surgery, School
of Dentistry, Kermanshah University of Medical S

Full name of responsible person

Hesam Nazari

Position

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Person responsible for scientific inquiries

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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