Clinical Trial Protocol
Iranian Registry of Clinical Trials

10 Nov 2026

The comparison of effectiveness of inferior alveolar nerve block with and without mandibular foramen determination by panoramic radiography

Protocol summary

Summary

Objectives: The comparison of effectiveness of inferior alveolar nerve block with and without use of panoramic radiography. Design: Randomized clinical trial. Setting and conduct: In this study, 31 patients referring for extraction of bilateral mandibular molar teeth in maxillofacial department of tabriz faculty of dentistry will be chosen. Case side will be chosen randomly, All anesthesias will be done by the same surgeon. In this study for each patient 2 IANB injections will be done in separate days that one of these injections in one side will be done routinely without using of panoramic radiography(control group) but the second injection in the opposite side will be done with using of panoramic radiography(test group). In test group the most anterior and superior point of mandibular foramen (MF) is detected and the occlusal plan is plotted and the distance between MF point and occlusal plan is measured. Needle penetration depth and other stages will be the same as the control group. Participants including major eligibility criteria: Patients with bilateral mandibular posterior molar teeth for extraction and having panoramic radiography that has been taken in the past 6 mounts will be included and patients with limited jaw opening and trismus and history of any systemic diseases will be excluded. Interventions: One side anesthesia will be done routinely without using of panoramic radiography and for the other side with MF determination by panoramic radiography. Main outcome measures(variables): The effectiveness of anesthesia of posterior teeth will evaluate by electric pulp tester after 10 minutes, positive results will be the sign of failure of injection.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT2013040610935N3**

Registration date: **2013-04-22, 1392/02/02**

Registration timing: **registered_while_recruiting**

Last update:

Update count: **0**

Registration date

2013-04-22, 1392/02/02

Registrant information

Name

Mohammad Ali Ghavimi

Name of organization / entity

Tabriz university of medical sciences

Country

Iran (Islamic Republic of)

Phone

+98 41 1334 6147

Email address

ghmd@irimc.org

Recruitment status

Recruitment complete

Funding source

Investigator

Expected recruitment start date

2012-12-21, 1391/10/01

Expected recruitment end date

2013-05-02, 1392/02/12

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

The comparison of effectiveness of inferior alveolar nerve block with and without mandibular foramen determination by panoramic radiography

Public title
The comparison of effectiveness of inferior alveolar nerve block with and without mandibular foramen determination by panoramic radiography
Purpose
Treatment
Inclusion/Exclusion criteria
Major Inclusion criteria: Indication for bilateral mandibular molar teeth extraction; People who are physically and mentally healthy and able to express their pain; People who have panoramic radiography for dental treatment in the past 6 months. Major Exclusion criteria: Don't have a panoramic radiography; people who the using of routine dental cartridges containing epinephrine are contraindicated; Using of mental anesthesia or other anesthesia; History of any systematic disease; Patients with limited jaw opening and trismus.
Age
From **19 years** old to **60 years** old
Gender
Both

Phase
3
Groups that have been masked
No information
Sample size
Target sample size: **31**
Randomization (investigator's opinion)
Randomized
Randomization description
Blinding (investigator's opinion)
Not blinded
Blinding description
Placebo
Not used
Assignment
Parallel
Other design features

Secondary Ids

1

Registry name
ندارد
Secondary trial Id
ندارد
Registration date
empty

Ethics committees

1

Ethics committee
Name of ethics committee
Ethics committee of Tabriz University of medical sciences and health services
Street address
Golgasht St, Azadi Ave
City
Tabriz
Postal code
5166414766
Approval date
2013-03-16, 1391/12/26
Ethics committee reference number
01222

Health conditions studied

1

Description of health condition studied
Pain
ICD-10 code
R52.9
ICD-10 code description
Pain, unspecified

Primary outcomes

1

Description
Anesthetic success
Timepoint
10 minutes after injection
Method of measurement
Electric pulp tester

Secondary outcomes

empty

Intervention groups

1

Description
Intervention: Inferior alveolar nerve block with mandibular foramen determination by panoramic radiography
Category
Treatment - Other

2

Description
Control: Inferior alveolar nerve block without the use of panoramic radiography
Category
Treatment - Other

Recruitment centers

1

Recruitment center
Name of recruitment center
Faculty of dentistry, Tabriz university of medical sciences
Full name of responsible person

Dr.Mohammad Ali Ghavimi

Street address

Golgasht St, Azadi Ave

City

Tabriz

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Tabriz university of medical sciences vice chancellor for research

Full name of responsible person

Seyed Kazem Shakouri

Street address

Golgasht St, Azadi Ave

City

Tabriz

Grant name

Grant code / Reference number

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

Yes

Title of funding source

Tabriz university of medical sciences vice chancellor for research

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

Tabriz faculty of Dentistry, Tabriz university of medical sciences

Full name of responsible person

Dr. Mohammad Ali Ghavimi

Position

DDS Oral and Maxillofacial surgery

Other areas of specialty/work

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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