Clinical Trial Protocol
Iranian Registry of Clinical Trials

18 Sep 2026

Comparison of the Effect of Benzocaine Gel(%20) and Lidocaine Spray(%10) on the Anesthesia of Maxillary First Molars Palatal Mucosa

Protocol summary

Summary

Injection is among dentistry a function that causes negative responses in children and hence .the reducing of injection pain due to that is one of the important problems in pediatric dentistry. The existing solution is, preparing the patient psychologically. Using some anti stress drugs and applying topical anesthesia before the injection. Topical anesthesia is one of the most important solutions before the injection. The attempt in this article compared two types of topical anesthetic agents; namely benzocaine gel (%20) and lidocaine spray (%10) in reducing the pain needle insertion in maxillary first molars palatal mucosa. Material and methods: in this clinical experimental study, 50 dental student who where physically fit and had no specific systemic diseases or drug sensitivity are select. The applicability of VAS was first are describe to every one of them and then benzocaine gel (%20) was supposedly use on the maxillary first molars palatal mucosa on one side, it use according to the manufactures instructions, needle of gauge 27 enter to the tissue .but no anesthetic agent is inject. After one minute, lidocaine spray (%10) applies to the other side of maxillary first molars palatal mucosa, it use according to its manufacturer's instructions. The needle of gauge 27 enter to the tissue but no anesthetic agent is inject .the selected individuals announced their rate pain due to using the gel and the spray in the selected individuals announce their rate pain due to using the gel and the spray. In accordance with VAS, the data was statistically analyzed by t-student test with the safety coefficient of %95.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT2013030512710N1**
Registration date: **2013-05-29, 1392/03/08**
Registration timing: **prospective**
Last update:
Update count: **0**

Registration date

2013-05-29, 1392/03/08

Registrant information

Name

Zeinab Jafary

Name of organization / entity

Dental University of Khorasgan

Country

Iran (Islamic Republic of)

Phone

+98 31 1778 2855

Email address

z.jafari@khuisf.ac.ir

Recruitment status

Recruitment complete

Funding source

Private

Expected recruitment start date

2013-05-30, 1392/03/09

Expected recruitment end date

2013-06-30, 1392/04/09

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Comparison of the Effect of Benzocaine Gel(%20) and Lidocaine Spray(%10) on the Anesthesia of Maxillary First Molars Palatal Mucosa

Public title

Comparison of the Effect of gel and spray in anesthesia of palatal mucosa

Purpose

Supportive

Inclusion/Exclusion criteria

Inclusion criteria: dental student who where phisically fit and had no specific systemic diseases or drug sensevity.

Age

From **20 years** old to **26 years** old

Gender

Both

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: **50**

Randomization (investigator's opinion)

N/A

Randomization description

Blinding (investigator's opinion)

Not blinded

Blinding description

Placebo

Not used

Assignment

Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Islamic Azad University Khorasgan Ethics Committee

Street address

Khurasgan

City

Isfahan

Postal code

Approval date

2010-09-04, 1389/06/13

Ethics committee reference number

89061307001

Health conditions studied

1

Description of health condition studied

local anesthesia

ICD-10 code

Y48.3

ICD-10 code description

Primary outcomes

1

Description

pain

Timepoint

after intrvention

Method of measurement

visual analog scale

Secondary outcomes

1

Description

patient cooperation

Timepoint

after intervention

Method of measurement

visual

Intervention groups

1

Description

use of Benzocaine Gel(%20) ,needel of gauge 27 entered to the tissue but no anasthetic agent was injected .

Category

Diagnosis

2

Description

use of Lidocaine Spray(%10) \\needel of gauge 27 entered to the tissue but no anasthetic agent was injected

Category

Diagnosis

Recruitment centers

1

Recruitment center

Name of recruitment center

Dental faculty of Islamic Azad University of Khorasgan

Full name of responsible person

Street address

Dental school, Islamic Azad University of Khorasgan,arghavanieh boulevard,Khorasgan ,Isfahan

City

Isfahan

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Dental Faculty of Islamic Azad University Khorasgan, Isfahan

Full name of responsible person

Lale Samadpoor

Street address

Dental school,Islamic Azad University of khorasgan,arghavanieh boulevard,Khorasgan ,Isfahan

City

Isfahan

Grant name

Grant code / Reference number

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

Yes

Title of funding source

Dental Faculty of Islamic Azad University Khorasgan, Isfahan

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

Dental Faculty of Islamic Azad University Khorasgan, Isfahan

Full name of responsible person

Zeinab Jafary

Position

Resident of pediatric dentistry

Other areas of specialty/work

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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