

Clinical Trial Protocol

Iranian Registry of Clinical Trials

21 Jul 2026

Effect of sucrose on reduction of pain during injection of local anesthesia

Protocol summary

Summary

Survey of the effect or lack of the effect of sweet nutrient before local anesthetic injection, is the subject of this study. fifty healthy and cooperative (class III or IV Frankle) 8-10 years old children who admitted in department of pediatrics of shiraz dentistry school that need to extraction of bilateral maxillary canine are selected. inclusion criteria of this study is: Need to extraction of bilateral maxillary primary canine; No history of post traumatic stress disorders or specific phobia related to dental settings; No history of abscess, redness and fistula in injection site; No allergy to lidocaine. Design of the study is split mouth, so that the child before injection the local anesthesia in one side, sucrose solution (30%) is received and before the injection of the other side (after 15 minutes), water as placebo is received. after use of sucrose solution, for prevention of dental caries, patient's mouth is washed. the dentist records the patients' reaction during injection based on Visual analogue scale and SEM scale(sound, eye, movement).

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT2016012224445N3**
Registration date: **2016-06-26, 1395/04/06**
Registration timing: **prospective**

Last update:

Update count: **0**

Registration date

2016-06-26, 1395/04/06

Registrant information

Name

Mahboobe Ahmadbeigi

Name of organization / entity

Shiraz University of Medical Sciences

Country

Iran (Islamic Republic of)

Phone

+98 71 3627 4866

Email address

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Recruitment status

Recruitment complete

Funding source

Shiraz University of Medical Sciences

Expected recruitment start date

2016-07-18, 1395/04/28

Expected recruitment end date

2016-12-18, 1395/09/28

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Effect of sucrose on reduction of pain during injection of local anesthesia

Public title

Effect of sweet nutrient on reduction of pain during injection of anesthesia

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria: 8-10 years old pateint; need to extraction of bilateral maxillary primary canine; cooperative Patient (class III or IV Frankle); no history of systemic disease Exclusion criteria: history of post traumatic stress disorders or specific phobia related to dental settings; history of abscess, redness and fistula in injection site; allergy to lidocaine.

Age

From **8 years** old to **10 years** old

Gender

Both

Phase
N/A

Groups that have been masked
No information

Sample size
Target sample size: 50

Randomization (investigator's opinion)
Randomized

Randomization description

Blinding (investigator's opinion)
Single blinded

Blinding description

Placebo
Not used

Assignment
Parallel

Other design features
The use of block randomization table

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Ethics committee of Shiraz University of Medical Sciences

Street address

Lule building, Karimkhanzand blvd, Shiraz, Fars, Iran

City

Shiraz

Postal code

Approval date

2016-04-10, 1395/01/22

Ethics committee reference number

IR.SUMS.REC.1395.14

Health conditions studied

1

Description of health condition studied

Local anesthesia

ICD-10 code

XXI

ICD-10 code description

Factors influencing health status and contact with health services

Primary outcomes

1

Description

Reduction of pain during injection

Timepoint

Immediately after intervention

Method of measurement

VAS (Visual Analogue Scale) and SEM scale (Sounds, Eye signs and Body Movement)

Secondary outcomes

empty

Intervention groups

1

Description

Intervention group: All participants drink socruse 30% solution first, then local anesthetic gel are received in the buccal mucosa of the maxillary primary canine in intervention side.

Category

Treatment - Drugs

2

Description

Control group: All participants drink water first, then local anesthetic gel are received in the buccal mucosa of the maxillary primary canine in control side.

Category

Treatment - Drugs

Recruitment centers

1

Recruitment center

Name of recruitment center

Shiraz University of Medical Sciences, School of Dentistry

Full name of responsible person

Mahboobe Ahmadbeigi

Street address

Department of Pediatric, School of Dentistry, Ghom abad, Ghasrodasht street, Shiraz, Fars, Iran

City

Shiraz

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Dr Ajami Shabnam

Full name of responsible person

zahra karanjam

Street address

Vice chancellor for research dental school of Shiraz University of Medical Sciences, Qasrodasht street, ghomabad, Shiraz, Fars, Iran

City

Shiraz

Grant name

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

Yes

Title of funding source

Dr Ajami Shabnam

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, Faculty of Dentistry

Full name of responsible person

Mahboobe Ahmadbeigi

Position

Pediatric dentistry assistant

Other areas of specialty/work

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Person responsible for scientific inquiries

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Associate Professor

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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