

Clinical Trial Protocol

Iranian Registry of Clinical Trials

30 Jun 2026

Comparison of the effectiveness of Cyanoacrylate with Dentin bonding on the Rate of Changes in Tooth Sensitivity in patient with Dental Sensitivity (clinical trials)

Protocol summary

Study aim

Comparison of the Effect of Cyanoacrylate with Dentin bonding on the rate of changes in Dental Sensitivity

Design

Phase three clinical trial with control group, with parallel groups, not blind, randomized into two groups.

Settings and conduct

This clinical trial study will be done on 40 patients referred to the periodontal department of the dental school Islamic Azad University and with complaint of tooth sensitivity will be performed in 2021. Sensitivity is measured at the beginning of the course and 1 day and 7 days after intervention with visual analog scale. Patients do not know in which treatment group they are. This test includes a score from 1 to 10 that the patient gives to her/his tooth sensitivity in response to air test.

Participants/Inclusion and exclusion criteria

1. Informed consent
2. complaining of dental sensitivity
3. Initial sensitivity more than 4 based on visual analog scale.
1. Pregnancy and lactation
2. Restored or cracked teeth

Intervention groups

This clinical trial parallel not blind study compares between 2 groups that first one receiving Cyanoacrylate and control group receiving Dentin bonding. A total of 40 patients (men and women) participate in this study and volunteers must have at least one tooth with sensitivity more than 4 score based on visual analog scale (vas). Participants randomly divide into two groups receiving Cyanoacrylate (applying by microbrush on cervical region of sensitive tooth) and control group receiving Dentin bonding (applying by microbrush on cervical region of sensitive teeth then wait for 20 seconds and then drying with air spray and placing again and curing with light cure). Secondary sensitivity is measured at the end of 24 hours and 1 week after intervention.

Main outcome variables

Rate of changes in dental sensitivity

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20120220009088N4**

Registration date: **2021-03-16, 1399/12/26**

Registration timing: **prospective**

Last update: **2021-03-16, 1399/12/26**

Update count: **0**

Registration date

2021-03-16, 1399/12/26

Registrant information

Name

Saeed Sadat Mansouri

Name of organization / entity

Country

Iran (Islamic Republic of)

Phone

+98 21 2291 9455

Email address

s_sadatmansouri@dentaliau.ac.ir

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2021-04-03, 1400/01/14

Expected recruitment end date

2021-04-21, 1400/02/01

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Comparison of the effectiveness of Cyanoacrylate with Dentin bonding on the Rate of Changes in Tooth Sensitivity in patient with Dental Sensitivity(clinical trials)

Public title

Comparison of the effectiveness of Cyanoacrylate with Dentin bonding on the Rate of Changes in Tooth Sensitivity

Purpose

Treatment

Inclusion/Exclusion criteria**Inclusion criteria:**

Informed consent Vital dental pulp The initial sensitivity is greater than 4based on visual analog scale (vas)

Exclusion criteria:

Pregnancy and lactation Restored or cracked teeth

Age

No age limit

Gender

Both

Phase

3

Groups that have been masked

No information

Sample size

Target sample size: **40**

Randomization (investigator's opinion)

Randomized

Randomization description

simple random method (code is assigned to each sample) and using SPSS statistical software .

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**

Ethics committee of Islamic Azad University of Medical Sciences , Tehran

Street address

Pasdaran Ave , neyestan 9th, Tahran Azad Dental School

City

Tehran

Province

Tehran

Postal code

۱۹۴۶۸۵۳۳۱۴

Approval date

2019-10-22, 1398/07/30

Ethics committee reference number

IR.IAU.DENTAL.REC.1398.045

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

Dental Sensitivity

ICD-10 code

K03.89

ICD-10 code description

Other specified diseases of hard tissues of teeth

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

The Rate of changes in Dental Sensitivity

Timepoint

At the beginning ,1day and 7days after intervention

Method of measurement

Visual Analogue Scale

Secondary outcomes

empty

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

Intervention group: Initial sensitivity is measured by air test and based on visual analog scale (vas) then Cyanoacrylate manufactured by Glustick in Canada is placed on cervical region of sensitive tooth.Secondry sensitivity will measured by air test and based on vas 24 hours and 7days after intervention.

Category

Other

2**Description**

Control group: Initial sensitivity is measured by air test and based on visual analog scale (vas) then Dentin bonding that manufactured in Corary company in Japon is placed on cervical region of sensitive tooth then wait for 20seconds and then dry it with poar then apply it again and cure it with light cure. Secondary sensitivity will measured by air test and based on vas 24 hours and 7days after intervention.

Category

Treatment - Drugs

Recruitment centers

1

Recruitment center

Name of recruitment center

Department of Periodontology, School of Dentistry,
Islamic Azad University of Tehran

Full name of responsible person

Parya Dadehbeiglou

Street address

Pasdaran Ave, neyestan 9th, Tehran Azad Dental
School

City

Tehran

Province

Tehran

Postal code

1946853314

Phone

+98 21 2256 4571

Email

Drsaeed_sadatmansouri@yahoo.com

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Islamic Azad University

Full name of responsible person

Arash Aizi

Street address

Pasdaran Ave, neyestan 9th, Tehran Azad Dental
School

City

Tehran

Province

Tehran

Postal code

1946853314

Phone

+98 21 2256 4571

Email

drarashazizi@yahoo.com

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

No

Title of funding source

Islamic Azad University

Proportion provided by this source

100

Public or private sector

Private

Domestic or foreign origin

Domestic

Category of foreign source of funding

empty

Country of origin**Type of organization providing the funding**

Academic

Person responsible for general inquiries

Contact

Name of organization / entity

Islamic Azad University

Full name of responsible person

Saeed Sadat Mansouri

Position

Periodontics Professor

Latest degree

Specialist

Other areas of specialty/work

Dentistry

Street address

PasdaranAve, neyestan 9th, Tehran Azad Dental
School

City

Tehran

Province

Tehran

Postal code

1946853314

Phone

0998 21 22564571

Email

s_sadatmansouri@dentaliau.ac.ir

Person responsible for scientific inquiries

Contact

Name of organization / entity

Islamic Azad University

Full name of responsible person

Saeed Sadat Mansouri

Position

Periodontics Professor

Latest degree

Specialist

Other areas of specialty/work

Dentistry

Street address

Pasdaran Ave, neyestan 9th, Tehran Azad Dental
School

City

Tehran

Province

Tehran

Postal code

1946853314

Phone

+98 21 2256 4571

Email

s_sadatmansouri@dentaliau.ac.ir

Person responsible for updating data

Contact

Name of organization / entity

Islamic Azad University

Full name of responsible person

Parya Dadehbeiglou

Position

Dental student

Latest degree

Medical doctor

Other areas of specialty/work

Dentistry

Street address

Pasdaraneve, neyestan 9th, Tehran Azad Dental School

City

Tehran

Province

Tehran

Postal code

1946853314

Phone

+98 21 2256 4571

Email

paryabeiglou@yahoo.com

Sharing plan

Deidentified Individual Participant Data Set (IPD)

Undecided - It is not yet known if there will be a plan to make this available

Study Protocol

Undecided - It is not yet known if there will be a plan to make this available

Statistical Analysis Plan

Undecided - It is not yet known if there will be a plan to make this available

Informed Consent Form

Undecided - It is not yet known if there will be a plan to make this available

Clinical Study Report

Undecided - It is not yet known if there will be a plan to make this available

Analytic Code

Undecided - It is not yet known if there will be a plan to make this available

Data Dictionary

Undecided - It is not yet known if there will be a plan to make this available