Clinical Trial Protocol
Iranian Registry of Clinical Trials

16 Sep 2026

Comparison of the effectiveness of Cyanoacrylate with Dentin bonding on the Rate of Changes in Tooth Sensitivity in patinet 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 complainment of tooth sensitivity will be performed in 2021.Sensitivity is measured at the beginning of the course and 1day and 7days 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 1week 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

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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 patinet 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
١٩٤٦٨٥٣٣١٤
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 begining ,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. Secondry 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

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Sponsors / Funding sources

1

Sponsor

Name of organization / entity
Islamic Azad University

Full name of responsible person
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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

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Person responsible for scientific inquiries

Contact

Name of organization / entity
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Full name of responsible person
Saeed Sadat Mansouri

Position
Periodontics Professor

Latest degree
Specialist

Other areas of specialty/work
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Person responsible for updating data

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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