

Clinical Trial Protocol

Iranian Registry of Clinical Trials

21 Jun 2026

Comparative evaluation of effect of 5% sodium fluoride varnish and Nd: YAG laser and their combative use on dentine hypersensitivity treatment.

Protocol summary

Summary

We chose a group of patients who had totally 60 hypersensitive teeth. Each patient had at least 4 hypersensitive teeth we randomly put this 4 teeth in 4 group. (The patients must have dentine hypersensitivity more than 6 months Not using other hypersensitivity methods and the teeth not having gingivitis, calculus and decay) First group didn't receive any treatment. Next group treated with 5% sodium fluoride varnish (A Durashield company production), third group received Nd: YAG laser (1 watt, 20 Hertz, 120 seconds) Assessment of the patient's pain was done with cold air blast and visual analog scale after stimulation by using an explorer and cold air before treatment, just after, 2 hours 1 week and second week after treatment.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT201105316664N1**

Registration date: **2011-06-14, 1390/03/24**

Registration timing: **retrospective**

Last update:

Update count: **0**

Registration date

2011-06-14, 1390/03/24

Registrant information

Name

Ahmad Mogharehabed

Name of organization / entity

Isfahan Faculty Of Dentistry

Country

Iran (Islamic Republic of)

Phone

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Email address

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Recruitment status

Recruitment complete

Funding source

Vice chancellor for research, Faculty of Dentistry, Isfahan University of Medical Sciences

Expected recruitment start date

2008-09-22, 1387/07/01

Expected recruitment end date

2009-03-19, 1387/12/29

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Comparative evaluation of effect of 5% sodium fluoride varnish and Nd: YAG laser and their combative use on dentine hypersensitivity treatment.

Public title

Comparative of effect of sodium fluoride varnish and Nd: YAG laser and their combative use on dentine hypersensitivity treatment

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria: Each patient had at least 4 hypersensitive teeth ; Having dentin hypersensitivity more than 6 months Not using other hypersensitivity methods. Exclusion criteria: Non-vital teeth; gingivitis; having calculus ; decayed teeth.

Age

No age limit

Gender

Both

Phase

2-3

Groups that have been masked

No information

Sample size

Target sample size: 60

Randomization (investigator's opinion)

Randomized

Randomization description

Blinding (investigator's opinion)

Single 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 Faculty of Dentistry

Street address

Isfahan Faculty Of Dentistry, Hezarjarib,Isfahan

City

Isfahan

Postal code

Approval date

2008-07-27, 1387/05/06

Ethics committee reference number

387095

Health conditions studied

1

Description of health condition studied

Dentinal Hypersensitivity

ICD-10 code

k08.9

ICD-10 code description

Disorder of teeth and supporting structures, unspecified

Primary outcomes

1

Description

Pain

Timepoint

Before treatment, just after, 2 hours 1 week and second week after treatment

Method of measurement

Visual analogs scale

Secondary outcomes

empty

Intervention groups

1

Description

Control group:didn't receive any treatment

Category

N/A

2

Description

Intervention: treated with 5% sodium floured varnish (A Durashield company production)

Category

Treatment - Drugs

3

Description

Intervention :received Nd: YAG laser (1wat, 20Hertz, 120second)

Category

Treatment - Drugs

4

Description

Intervention:Nd: YAG laser(1wat, 20Hertz, 120second) +5% sodium floured varnish

Category

Treatment - Drugs

Recruitment centers

1

Recruitment center

Name of recruitment center

Periodontology Department, Faculty Of Dentistry

Full name of responsible person

Zeinab Abdi Zamhari

Street address

Isfahan Faculty Of Dentistry, Hezarjarib,Isfahan

City

Isfahan

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Vice chancellor for research, Faculty of Dentistry, Isfahan University of Medical Sciences

Full name of responsible person

Dr Savabi

Street address

Isfahan Faculty Of Dentistry, Hezarjarib,Isfahan

City

Isfahan

Grant name

Grant code / Reference number

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

Yes

Title of funding source

Vice chancellor for research, Faculty of Dentistry, Isfahan University of Medical Sciences

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

Isfahan Faculty Of Dentistry

Full name of responsible person

Dr.Ahmad Mogharehabed

Position

Priodontologist

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