

Clinical Trial Protocol

Iranian Registry of Clinical Trials

29 May 2026

The effects of use of Diode (980 nm) laser in pocket therapy on the periodontal health after nonsurgical periodontal therapy

Protocol summary

Summary

Objectives: The effects of use of Diode (980 nm) laser in pocket therapy on the periodontal health Parameters (GL,PD, BI, CAL, PI, MGI) after nonsurgical periodontal therapy. Type & Method of Study: Randomized clinical trial. Sampling Procedure: 190 sites in 20 patients. Inclusion criteria: Having chronic generalized moderate to advanced periodontal disease; Having at least 4 teeth per quadrant; Having at least 4 sites with probing depth of 4 mm; Bleeding on probing. Exclusion criteria: systemic disease; pregnancy. Intervention: Laser therapy. Primary outcome measure: Pocket Depth; Clinical Attachment Loss; Modified Gingival Index; Plaque Index; Gingival Level; Bleeding Index.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT201204289570N1**
Registration date: **2012-06-23, 1391/04/03**
Registration timing: **retrospective**

Last update:

Update count: **0**

Registration date

2012-06-23, 1391/04/03

Registrant information

Name

Davoud Zare

Name of organization / entity

Dental faculty of Shahid Sadoughi University of
Medical Sciences

Country

Iran (Islamic Republic of)

Phone

+98 35 1625 5881

Email address

reza.molla@ssu.ac.ir

Recruitment status

Recruitment complete

Funding source

Vice chancellor for research, Shahid Sadoughi University
of Medical Sciences

Expected recruitment start date

2011-09-23, 1390/07/01

Expected recruitment end date

2012-04-18, 1391/01/30

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

The effects of use of Diode (980 nm) laser in pocket
therapy on the periodontal health after nonsurgical
periodontal therapy

Public title

The effects of use of laser in pocket therapy on the
periodontal health after nonsurgical periodontal therapy

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria: Having chronic generalized moderate
to advanced periodontal disease; Having at least 4 teeth
per quadrant; Having at least 4 sites with probing depth
of 4 mm; Bleeding on probing; Radiographic signs of
bone resorption; no Smoking (more than 10 cigarettes
per day); not Periodontal treatment or antibiotics within
less than 6 months. Exclusion criteria: systemic disease;
bleeding disorders; pregnancy; Epilepsy; Mental disorder.

Age

No age limit

Gender

Both

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: **190**

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 Shahid Sadoughi University of Medical Sciences

Street address

central building, Bahonar square

City

Yazd

Postal code

Approval date

2010-08-20, 1389/05/29

Ethics committee reference number

17/1/49665

Health conditions studied

1

Description of health condition studied

chronic periodontitis

ICD-10 code

K05.3

ICD-10 code description

Chronic periodontitis

Primary outcomes

1

Description

modified gingival index

Timepoint

begining of the study and 2 months later

Method of measurement

Examination - a digit between 0 to 4

2

Description

clinical attachment level

Timepoint

begining of the study and 2 months later

Method of measurement

Examination - millimeter

3

Description

pocket depth

Timepoint

begining of the study and 2 months later

Method of measurement

Examination - millimeter

4

Description

bleeding index

Timepoint

begining of the study and 2 months later

Method of measurement

Examination - percentage

5

Description

plaque index

Timepoint

begining of the study and 2 months later

Method of measurement

Examination - percentage

6

Description

gingival level

Timepoint

begining of the study and 2 months later

Method of measurement

Examination - millimeter

Secondary outcomes

empty

Intervention groups

1

Description

In intervention group scaling and root planning with laser used.

Category

Other

2

Description

In control group only scaling and root planning used.

Category

Other

Recruitment centers

1

Recruitment center

Name of recruitment center

Dental faculty of Shahid Sadoughi University of
Medical Sciences

Full name of responsible person

Street address

City

Yazd

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Vice chancellor for research, Shahid Sadoughi
University of Medical Sciences

Full name of responsible person

Fatemeh Ezzeddini

Street address

Bahonar square

City

Yazd

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, Shahid Sadoughi 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

Dental faculty of Shahid Sadoughi University of
Medical Sciences

Full name of responsible person

Davoud Zare

Position

Resident of periodontology

Other areas of specialty/work

Street address

Dental faculty, Fazaye-Sabz crossroad

City

Yazd

Postal code

Phone

+98 35 1625 8813

Fax

Email

d_z80@yahoo.com

Web page address

**Person responsible for scientific
inquiries**

Contact

Name of organization / entity

Dental faculty of Shahid Sadoughi University of
Medical Sciences

Full name of responsible person

Dr. Amad Haerian

Position

associated professor

Other areas of specialty/work

Street address

Dental faculty, Fazaye-Sabz crossroad

City

Yazd

Postal code

Phone

+98 35 1625 8813

Fax

Email

Ahmad.haerian@gmail.com

Web page address

Person responsible for updating data

Contact

Name of organization / entity

Dental faculty of Shahid Sadoughi University of
Medical Sciences

Full name of responsible person

Davoud Zare

Position

Resident of periodontology

Other areas of specialty/work

Street address

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+98 35 1625 8813

Fax

Email

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